

104(e) Response
Portland General Electric – Harborton (August 31, 2009)

EPA Question	Response	Records/Information Available
Section 1.0 - Respondent Information		
1. Provide the full legal, registered name and mailing address of Respondent.	Portland General Electric Company 121 SW Salmon Street Portland, OR 97204	
2. For each person answering these questions on behalf of Respondent, provide:		
Site Owner/Operator: Portland General Electric		
a. full name;	Arya Behbehani-Divers	
b. title;	Manager, Environmental Services	
c. business address; and	121 SW Salmon Street m/s 3WTCBR05 Portland, OR 97204	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503-464-8141 Electronic Mail Address: Arya.Behbehani-Divers@pgn.com Fax Number: 503-464-8527	
Site Consultant: URS Corporation		
a. full name;	Laura McWilliams, PhD, LG; Ashley Kaiser; Clifford Pearson	
b. title;	Senior Geologist; Environmental Scientist; Graduate Geologist	
c. business address; and	111 SW Columbia, Suite 1500 Portland, OR 97225-5850	
d. business telephone number, electronic mail address, and FAX machine number.	Business Telephone Number: 503-222-7200 Electronic Mail Addresses: Laura_McWilliams@urscorp.com; Ashley_Kaiser@urscorp.com; Clifford_Pearson@urscorp.com; Fax Number: 503-222-4292	
3. If Respondent wishes to designate an individual for all future correspondence concerning this Site, please indicate here by providing that individual's name, address, telephone number, fax number, and, if available, electronic mail address.	Arya Behbehani-Divers Portland General Electric Manager, Environmental Services 121 SW Salmon Street - 3WTCBR05 Portland, OR 97204 Telephone Number: 503-464-8141 Fax Number: 503-464-8527 Electronic Mail Address: Arya.Behbehani-Divers@pgn.com	
Section 2.0 - Owner/Operator		

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<p>4. Identify each and every Property that Respondent currently owns, leases, operates on, or otherwise is affiliated or historically has owned, leased, operated on, or otherwise been affiliated with within the Investigation Area during the period of investigation (1937 to Present). Please note that this question includes any aquatic lands owned or leased by Respondent.</p>	<p>Portland General Electric Company (PGE) will be preparing separate 104(e) responses for properties within the Investigation Area. This response only applies to the Harborton Substation, (located at 12500 NW Marina Way, Portland, Oregon 97231) and nearby PGE-owned parcels.</p> <p>As shown on the attached location map (Q04_Harborton Location Map.pdf), this response includes seven parcels currently owned by PGE and one parcel historically owned by PGE. These are referred to herein as Parcels A through H, and are described as follows:</p> <p><u>Currently Owned Parcels</u></p> <p>Parcel A – approximately 64 acre developed parcel that includes the Harborton Substation</p> <p>Parcel B – approximately 13 acre undeveloped, vegetated parcel north of the Harborton Substation</p> <p>Parcel C – parcel with transmission lines and a historical 14” fuel pipeline southeast of the Harborton Substation</p> <p>Parcel D – parcel with transmission lines southeast of the Harborton Substation</p> <p>Parcel E – parcel with cable terminal on west side of the Willamette River</p> <p>Parcel F – parcel with cable terminal and electric transmission lines located on the east side of the Willamette River</p> <p>Parcel G – parcel with switching anchors southwest of the Harborton Substation</p> <p><u>Historically Owned Parcel</u></p> <p>Parcel H – parcel with transmission lines southeast of Harborton Substation</p> <p>As defined herein, “the Harborton parcels” refer to all seven currently owned parcels (Parcels A through G), whereas “Harborton Substation” refers exclusively to Parcel A. The responses to the majority of these questions are applicable only to Parcel A. For questions that are applicable to multiple parcels, individual answers are listed for each. Please note that Parcel G is outside the study area identified for the Portland Harbor Superfund site. However, it is included in the response because it is listed in Question 7b, below.</p> <p>PGE leases the aquatic lands along the Willamette River in front of the Harborton Substation (Parcel A) and Parcel B. For further details, see the response to Questions 4b and 7, as well as the aquatic lands leases (Q07_1976-1986 DSL Aquatic Lands Lease.pdf, Q07_1986-1996 DSL Aquatic Lands Lease.pdf, and Q07_1996-2015 DSL Aquatic Lands Lease.pdf) attached in response to Question 7.</p> <p>As shown on the attached map (Q04_Harborton Location Map.pdf), the Bonneville Power Administration (BPA) owns the property south of Parcels A (Harborton Substation) and C. The BPA property, called the Oil Fire Training Grounds (OFTG), is used by BPA for access to BPA high tension power lines. From 1951 to 1988, the City of Portland (COP) leased the OFTG property from BPA and used it to train firemen to extinguish oil-based fires, which resulted in</p>	<p>Question 4 Attachment Q04_Harborton Location Map.pdf</p> <p>Also see Question 7 Attachments Q07_1976-1986 DSL Aquatic Lands Lease.pdf Q07_1986-1996 DSL Aquatic Lands Lease.pdf Q07_1996-2015 DSL Aquatic Lands Lease.pdf</p>

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	the release of petroleum hydrocarbons and chlorinated solvents at the OFTG. From 1973 to 2003, BPA granted PGE permits/easement through the OFTG for an underground pipeline connecting the aboveground storage tanks (ASTs) at the Harborton Substation to the dock at Georgia Pacific (GP). The PGE pipeline easement through the OFTG was located in areas of contaminated soil. BPA terminated the PGE easement in June 2003. In order to clarify PGE's involvement with the OFTG, the response to Question 4h includes information available to PGE regarding the OFTG.	
a. Currently Owns	PGE currently owns the Harborton parcels (Parcels A through G). See the attached location map (Q04_Harborton Location Map.pdf) and attached plats (Q04a_Harborton Plat 1.pdf, Q04a_Harborton Plat 2.pdf, and Q04a_Harborton Plat 3.pdf).	Question 4 Attachments Q04_Harborton Location Map.pdf Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 2.pdf Q04a_Harborton Plat 3.pdf
b. Currently Leases	<p>Since 1976, PGE has had a Submerged and Submersible Land Lease (ML-9473) from the State of Oregon, Division of State Lands (DSL) for the aquatic lands along the Willamette River in front of the Harborton Substation (Parcel A) and Parcel B; see the attached plat (Q04a_Harborton Plat 2.pdf). On 1 May 1976, PGE was granted a 10-year aquatic lands lease from the DSL for a 3,500-foot long by 150-foot wide stretch of aquatic lands along Harborton Substation (Parcel A) and Parcel B; see the document (Q07_1976-1986 DSL Aquatic Lands Lease.pdf) attached in response to Question 7. On 1 May 1986, PGE was granted another 10-year aquatic lands lease from DSL for the 3,500-foot long by 150-foot wide stretch of aquatic lands along Parcels A and B; see the document (Q07_1986-1996 DSL Aquatic Lands Lease.pdf) attached in response to Question 7. On 1 May 1996, PGE was granted a 20-year aquatic lands lease from DSL; however, the lease was reduced to a 3,500-foot long by 50-foot wide stretch of aquatic land along Harborton Substation (Parcel A) and Parcel B; see the document (Q07_1996-2015 DSL Aquatic Lands Lease.pdf) attached in response to Question 7. The current aquatic lands lease, which expires on 30 April 2015, protects PGE's riparian frontage rights and disallows any over-water activities without explicit permission from the State of Oregon.</p> <p>There are no leases associated with the other five PGE-owned parcels (Parcels C through G) or Parcel H during PGE's historical ownership.</p>	<p>Question 4 Attachment Q04a_Harborton Plat 2.pdf</p> <p>Also see Question 7 Attachments Q07_1976-1986 DSL Aquatic Lands Lease.pdf Q07_1986-1996 DSL Aquatic Lands Lease.pdf Q07_1996-2015 DSL Aquatic Lands Lease.pdf</p>
c. Currently Operates	PGE currently operates the Harborton Substation (Parcel A). To the best of PGE's knowledge, after reasonable inquiry, PGE's activities on Parcels C through G are currently limited to maintenance, as needed, of the transmission lines.	
d. Currently otherwise affiliated with	Not applicable. There are no other properties currently affiliated with the Harborton Substation (Parcel A) or the other PGE-owned parcels (Parcels B through G).	
e. Historically Has Owned	<p>PGE historically owned Parcel H; see the plat (Q04a_Harborton Plat 1.pdf) attached in response to Question 4. PGE purchased Parcel H on 11 August 1939 and sold it to the Oregon State Highway on 19 June 1962; see the deeds (Q07_Deed PGE to Oregon State Highway 1962.pdf and Q07_Deed Western Timber to PGE 1939.pdf) attached in response to Question 7.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, PGE also historically owned, had rights to, or interest in the triangular portion of land immediately north of Parcel F, which is identified with the letter 'D' in attached document (Q04a_Harborton Plat 3.pdf). To the best of PGE's knowledge, after reasonable inquiry, PGE does not know when it may have purchased or</p>	<p>Question 4 Attachments Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 3.pdf Q04e_Quit Claim PGE to Portland Manuf Co 1954.pdf</p> <p>Also see Question 7 Attachments Q07_Deed PGE to Oregon State Highway 1962.pdf Q07_Deed Western Timber to PGE 1939.pdf</p>

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	<p>acquired interest in this property. To the best of PGE's knowledge, after reasonable inquiry, PGE never developed, operated on, or had any activities on this property. On 16 November 1954, PGE conveyed its rights, title, and/or interest in the property to the Portland Manufacturing Company via a quit claim deed; see the attached document (Q04e_Quit Claim PGE to Portland Manuf Co 1954.pdf). This property has remained undeveloped; see the document (Q13m_2001-2008 PortlandMaps Aerials.pdf) attached in response to Question 13m. This property, which PGE historically owned or held interest in, is not addressed further in this or other 104(e) responses.</p> <p>Other properties that PGE has historically owned within the Investigation Area are addressed in separate 104(e) responses.</p>	<p>Also see Question 13 Attachment Q13m_2001-2008 PortlandMaps Aerials.pdf</p>
f. Historically Has Leased	<p>Not applicable. PGE did not historically lease the Harborton Substation (Parcel A) or the other PGE-owned parcels (Parcels B through G) prior to ownership. PGE currently leases the aquatic lands along the Willamette River in front of the Harborton Substation (Parcel A) and Parcel B.</p>	
g. Historically Has Operated	<p>On 29 May 1974, PGE signed a use agreement with GP for the GP docking facility, located south of the Harborton Substation; see the attached document (Q04g_PGE-GP Fuel Transfer Agmt 1974.pdf). The terms of the agreement granted PGE the right to install and maintain a ship-to-shore petroleum transfer and piping facility on the GP dock for the purpose of fuel delivery from ships and barges at the GP dock to the ASTs at the Harborton Substation (Parcel A). This agreement was renewed/revised in 1980 and again in 1995, extending the agreement to 1 July 2000; see the documents (Q07_PGE-GP Agreement 1980.pdf and Q07_Letter Regarding GP Agmt Renewal 1995.pdf) attached in response to Question 7. Also see the attached documents (Q04g_1971 COE dredge Permit.pdf and Q04g_1972-01-13 dredging authorization.pdf) relating to the construction and dredging permits issued by the U.S. Army Corp of Engineers (USACE) to PGE related to the construction of the transfer and piping facility at the GP docking facility.</p>	<p>Question 4 Attachments Q04g_PGE-GP Fuel Transfer Agmt 1974.pdf Q04g_1971 COE dredge Permit.pdf Q04g_1972-01-13 dredging authorization.pdf</p> <p>Also see Question 7 Attachments Q07_PGE-GP Agreement 1980.pdf Q07_Letter Regarding GP Agmt Renewal 1995.pdf</p>
h. Historically otherwise affiliated with	<p>From 1973 to 2003, BPA granted PGE permits/easement to construct and maintain a 14-inch pipeline across the BPA-owned OFTG, south of the Harborton Substation (Parcel A) and Parcel C. The underground pipeline connected the ASTs at the Harborton Substation to the dock at GP. From 1951 to 1988, the COP leased the OFTG property from BPA to train firemen to extinguish oil-based fires, which resulted in the release of petroleum hydrocarbons and chlorinated solvents at the OFTG. The PGE pipeline easement through the OFTG was within areas of contaminated soil.</p> <p>To the best of PGE's knowledge, after reasonable inquiry:</p> <ul style="list-style-type: none"> On 10 October 1973, the BPA granted PGE a permit (Service Line/Transmission Permit No. 49630) to construct/install and maintain a 14-inch pipeline through the OFTG; see the attached document (Q04h_1973-10-10 PGE-BPA Pipeline Permit.pdf). This pipeline was buried a minimum of 4 feet below the surface. On 10 December 1991, PGE granted a 5-year lease to the Columbia Petroleum Company (CP) for the ASTs at the Harborton Substation and associated pipelines, including the pipeline within the OFTG; see the attached documents (Q07_PGE Lease to CP 1991.pdf and Q07_PGE – CP Lease Synopsis.pdf) attached in response to 	<p>Question 4 Attachments Q04h_1973-10-10 PGE-BPA Pipeline Permit.pdf Q04h_1991-11-20 CP Letter to PGE.pdf Q04h_1992-04-14 COP Stop Work Order & Follow Up.pdf Q04h_1992-04-16 COP to NFS.pdf Q04h_1992-05-08 BPA Letter to PGE.pdf Q04h_1992-06-01 BPA Letter to PGE.pdf Q04h_1992-06-16 PGE Letter to BPA.pdf Q04h_1992-07-22 CP Appeal to COP.pdf Q04h_CP - COP Correspondence 1992-08.pdf Q04h_1992-08-05 BPA Permit to PGE.pdf Q04h_1992-08-13 PGE Letter to BPA.pdf Q04h_1993-03-30 PGE Letter to BPA.pdf Q04h_1994-01-10 BPA Permit Renewal to PGE.pdf Q04h_1994-08-05 BPA Letter to PGE.pdf Q04h_1999-01-22 BPA Letter to PGE.pdf Q04h_1999-03-09 BPA Easement to PGE.pdf Q04h_2002-10-31 DOJ Letter to PGE.pdf</p>

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	<p>Question 7.</p> <p>Under the terms of the lease, CP was granted permission to modify the tanks and associated pipelines for asphalt receiving, processing, and storing. Extensive modifications to the tanks and pipelines had already begun when it was determined that CP was in violation of the PGE lease agreement and the COP permits. The lease was terminated on 30 March 1992. PGE requested that CP vacate the Harborton Substation and return the ASTs and piping back to operable conditions by 31 December 1992; see the document (Q07_1992-10-27 PGE Request to CP to vacate.pdf) attached in response to Question 7.</p> <p>For further details, see the attached documents (Q04h_1991-11-20 CP Letter to PGE.pdf, Q04h_1992-04-14 COP Stop Work Order & Follow Up.pdf, Q04h_1992-04-16 COP to NFS.pdf, Q04h_1992-05-08 BPA Letter to PGE.pdf, Q04h_1992-06-01 BPA Letter to PGE.pdf, Q04h_1992-06-16 PGE Letter to BPA.pdf, Q04h_1992-07-22 CP Appeal to COP.pdf, and Q04h_CP - COP Correspondence 1992-08.pdf), as well as the documents (Q07_1992-01-02 CP Letter to PGE.pdf, Q07_1992-01-14 PGE Letter to CP.pdf, Q07_1992-04-28 CP Letter to PGE.pdf, and Q07_1992-05-26 PGE Letter to CP.pdf) attached in response to Question 7.</p> <ul style="list-style-type: none"> • From 1992 to 1999, BPA granted PGE yearly permits for the use of the pipeline facilities, under additional conditions for use; see the attached documents (Q04h_1992-08-05 BPA Permit to PGE.pdf, Q04h_1992-08-13 PGE Letter to BPA.pdf, Q04h_1993-03-30 PGE Letter to BPA.pdf, Q04h_1994-01-10 BPA Permit Renewal to PGE.pdf, Q04h_1994-08-05 BPA Letter to PGE.pdf, and Q04h_1999-01-22 BPA Letter to PGE.pdf). • On 9 March 1999, BPA granted PGE a permanent easement for the PGE pipeline across the OFTG, with exceptions; see the attached documents (Q04h_1999-03-09 BPA Easement to PGE.pdf). • In June 2003, BPA terminated the PGE easement for the PGE pipeline and pipeline facilities; see the attached document (Q04h_2003-06-05 PGE Letter to BPA.pdf). Also see the attached document (Q04h_2002-10-31 DOJ Letter to PGE.pdf). 	<p>Q04h_2003-06-05 PGE Letter to BPA.pdf</p> <p>Also see Question 7 Attachment Q07_PGE Lease to CP 1991.pdf Q07_PGE – CP Lease Synopsis.pdf Q07_1992-10-27 PGE Request to CP to vacate.pdf Q07_1992-01-02 CP Letter to PGE.pdf Q07_1992-01-14 PGE Letter to CP.pdf Q07_1992-04-28 CP Letter to PGE.pdf Q07_1992-05-26 PGE Letter to CP.pdf</p>
<p>5. Provide a brief summary of Respondent's relationship to each Property listed in response to Question 4 above, including the address, Multnomah County Alternative Tax lot Identification number(s), dates of acquisition, period of ownership, lease, operation, or affiliation,</p>		

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and a brief overview of Respondent's activities at the Properties identified.		
a. Relationship	PGE is the current owner of the Harborton Substation (Parcel A) and the nearby parcels (Parcels B through G). PGE is the historical owner of the nearby Parcel H.	
b. Address	<p>The Harborton Substation (Parcel A) address is: 12500 NW Marina Way Portland, Oregon 97231</p> <p>The alternate address below has also been used to describe the Harborton Substation (Parcel A): 12430 NW St. Helens Road Portland, Oregon 97231</p> <p>No addresses are associated with Parcels B through H.</p>	
c. Multnomah County Alternative Tax ID #	<p>The Multnomah County Alternative Tax Account IDs for the Parcels A through H are:</p> <p>Parcel A – R971340180 Parcel B – R971340100 Parcel C – R971340160 Parcel D – R971340410 Parcel E – R971340130 Parcel F – R971350100 Parcel G – R971340200 Parcel H – No Tax ID (currently part of NW Marina Way)</p> <p>See the attached documents (Q05c_Parcel A Property Details.pdf, Q05c_Parcel B Property Details.pdf, Q05c_Parcel C Property Details.pdf, Q05c_Parcel D Property Details.pdf, Q05c_Parcel E Property Details.pdf, Q05c_Parcel F Property Details.pdf, Q05c_Parcel G Property Details.pdf, Q05c_TaxMapWest.pdf and Q05c_TaxMapEast.pdf) and the document (Q04_Harborton Location Map.pdf) attached in response to Question 4.</p>	<p>Question 5 Attachments Q05c_Parcel A Property Details.pdf Q05c_Parcel B Property Details.pdf Q05c_Parcel C Property Details.pdf Q05c_Parcel D Property Details.pdf Q05c_Parcel E Property Details.pdf Q05c_Parcel F Property Details.pdf Q05c_Parcel G Property Details.pdf Q05c_TaxMapWest.pdf Q05c_TaxMapEast.pdf</p> <p>Also see Question 4 Attachment Q04_Harborton Location Map.pdf</p>
d. Date Acquired (leased)	<p>The following summarizes the date PGE acquired the Harborton Substation (Parcel A) and nearby parcels (Parcels B through H):</p> <p>Parcels A and B - Purchased on 21 October 1968 from Peninsula Agencies Incorporated. Parcels C, D, and H - Purchased on 11 August 1939 from Western Timber Company. Parcel E - Purchased on 4 April 1975 from Harry and Esme Meredith. Parcel F - Purchased the majority of the parcel (1.3 acres) on 9 September 1939 from the Gatton Estate. The small northern portion of the parcel (0.13 acres) was acquired on 18 October 1954 from the Portland Manufacturing Company. Parcel G - Purchased on 8 September 1944 from Garfield and Wilma Strike.</p> <p>See the documents (Q04a_Harborton Plat 1.pdf, Q04a_Harborton Plat 2.pdf, and Q04a_Harborton Plat 3.pdf) attached in response to Questions 4a and the deeds (Q07_Deed</p>	<p>See Question 4 Attachments Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 2.pdf Q04a_Harborton Plat 3.pdf</p> <p>Also see Question 7 Attachments Q07_Deed Gatton to PGE 1939.pdf Q07_Deed Western Timber to PGE 1939.pdf Q07_Deed Strike to PGE 1944.pdf Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf Q07_Deed Pennisula to PGE 1968.pdf Q07_Deed Meredith to PGE 1975.pdf</p>

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	Gatton to PGE 1939.pdf, Q07_Deed Western Timber to PGE 1939.pdf, Q07_Deed Strike to PGE 1944.pdf, Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf, Q07_Deed Penninsula to PGE 1968.pdf, and Q07_Deed Meredith to PGE 1975.pdf) attached to Question 7.	
e. Period of Lease	The period of PGE's aquatic lands lease for the submerged and submersible land along the Willamette River in front of the Harborton Substation (Parcel A) and Parcel B is 1976 to present.	
f. Period of Ownership, Lease or Operation	<p>The periods of PGE's ownership for the Harborton Substation (Parcel A) and the nearby parcels (Parcels B through H) are:</p> <p style="margin-left: 40px;">Parcels A and B - 1968 to present. Parcels C and D - 1939 to present. Parcel E - 1975 to present. Parcel F – 1939/1954 to present. Parcel G - 1944 to present. Parcel H – 1939 to 1962</p> <p>See the response to Questions 5e for the period of PGE's aquatic lands lease.</p>	
g. Activities	<p>To the best of PGE's knowledge, after reasonable inquiry, the following activities occurred at the Harborton parcels (Parcels A through G) and the historically owned Parcel H:</p> <p><u>Harborton Substation (Parcel A) Activities</u></p> <p>Harborton Substation was originally constructed in the early 1970s to provide electrical distribution, additional generating capacity during emergencies/high use periods, and support to the Trojan Nuclear Plant. Currently, Harborton Substation is used to provide continuous electrical power to distribution substations and customers, and to protect the public and equipment from electrical and mechanical faults.</p> <p>The Harborton Substation is divided into eight areas, which are depicted in Figure 2 of the Pre-RI Work Plan (Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf) and Figure 2 of the Phase I and Phase II Pre-RI Report (Q15_Bridgewater-HAI 2001 Phase I and II.pdf), which are attached in response to Question 15. These eight areas include:</p> <ol style="list-style-type: none"> 1) Former Generating Plant (or east equipment storage yard), 2) Distribution substation, 3) Former distillate fuel tank area and fuel transfer station, 4) Former rail car unloading area, 5) Low-lying area, 6) Utility pole storage yard, 7) 115 kV switchyard, and 8) Equipment storage yards. <p>Activities at Harborton Substation (Parcel A) can be separated into four general categories:</p> <ol style="list-style-type: none"> 1) Former power generation, 2) Substation transmission and distribution, 3) Equipment storage, and 4) Waste handling. 	<p>Question 5 Attachment Q05g_Harborton – Photo Log.pdf</p> <p>See Question 15 Attachments Q15_1973 PGE Environmental Report.pdf Q15_1999 Response to DEQ Strat.pdf Q15_1998-07-06 Phase I Env Site Assessment.pdf Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_Bridgewater-HAI 2001 Phase I and II.pdf Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf</p> <p>Also see Question 21 Attachment Q21a_1996-2002 Batch Dis. Request.pdf</p>

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	<p>A series of photographs taken on 1 April 2009 documents the site and the current activities; see the attached document (Q05g_Harborton – Photo Log.pdf).</p> <p><u>Former Generating Plant/East Equipment Storage Yard</u> Between 1973 and 1980, the Generating Plant at Harborton Substation generated electricity during intermittent operations using natural gas and distillate fuel. The Generating Plant was comprised of four dual Turbo Power & Marine Systems (“Twin Pacs”) each of which utilized two Pratt & Whitney Aircraft gas turbine engines. The output shafts of the two gas turbines were connected to each end of the electric generator. Electrical transmission lines carry the electrical power from the substation. Fuel was delivered to the turbines through a pipeline connected to the NW Natural Gas Company System in the case of natural gas, and from the onsite ASTs in the case of distillate fuels. The Generating Plant was dismantled in 1985.</p> <p>Since 1988, the area has been used for electrical equipment storage and is sometimes called the east equipment storage yard. From 1988 to 2002, new and non-leaking surplus (used) equipment (e.g., transformers, skid-mounted oil tanks, and capacitors) with < 500 ppm PCBs were stored in this area. Since 2002, non-leaking surplus (used) equipment with < 50 ppm PCBs is stored in this area.</p> <p>This area also has a maintenance building that was used for turbine repair and parts storage when the Generating Plant was in operation. Following the end of generating activities, this building was converted to accommodate the handling of PCB oil and other waste handling activities in 1995/1996. From 1995/1996 to 2002, the maintenance building was used as a waste handling facility. PGE used the maintenance building and surrounding area for the temporary storage, consolidation, management, and packaging of onsite and off-site PCB-containing electrical equipment, drained electrical equipment oil, and spill response excavated soil and clean up material prior to off-site disposal. Obsolete equipment oil draining activities only occurred within the maintenance building. Currently, the maintenance building contains miscellaneous supplies (e.g., desk, tools, etc).</p> <p>From 1995/1996 to 2002, the area outside the maintenance building was used to filter water collected from off-site vaults. Vault water was delivered in drums to the Harborton Substation, stored outside the maintenance building, and carbon filtered to remove any oils. After filtration, the filtered water was transported to Portland Service Center (PSC, 3700 SE 17th Ave, Portland, Oregon) to be discharged to the COP sanitary sewer. The water was tested and a batch discharge permit was obtained for each batch. See the batch discharge documents (Q21a_1996-2002 Batch Dis. Request.pdf) attached in response to Question 21a. For additional information regarding the generation of vault water, see the separate 104(e) response for Miscellaneous Spills, Distribution Network, and Submerged Cables.</p>	

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	<p><u>Switchyard and Distribution Substation</u> Harborton Substation is a transmission and distribution substation. Its switchyard is an engineered collection of high voltage equipment which transforms higher transmission voltages to lower sub-transmission voltage. This sub-transmission voltage is routed to the nearby distribution substation. The distribution substation is comprised of high voltage equipment that transforms higher sub-transmission voltage to lower distribution voltage. High voltage switches and circuit breakers within the distribution substation allow circuits to be safely opened for routine maintenance or to interrupt electrical faults. Automatic operation is achieved through control, protection, telemetry, and communication systems located within the substation.</p> <p><u>AST Area</u> Activities in the AST area include the historical fuel transfer to, storage, and transfer from the ASTs via pipeline, barge, and rail car from approximately 1973 to 1985. These tanks were emptied in 1985. In approximately 1993, the tanks were cleaned, openings were cut into their sides, and the tanks began to be used for indoor storage (e.g., storage of concrete forms, concrete blankets, and nuts and bolts).</p> <p><u>Rail Car Unloading Area</u> From approximately 1973 to 1980, the rail car unloading area was used to unload diesel fuel from rail cars along the rail spur. The rail spur has a capacity of 26 rail cars.</p> <p><u>Low-Lying Area</u> This undeveloped, low-lying area is located within the perimeter dike on the north side of the developed areas of Harborton Substation. Portions of the developed areas of Parcel A drain stormwater to this low-lying area, but to the best of PGE's knowledge, after reasonable inquiry, no other activities have occurred in this area.</p> <p><u>Pole Storage Yard</u> PGE installed a gravel access road in this area in 1992. Since that time, this area has been used to store new and used power poles. Currently, new power poles are typically pre-treated (by manufacturer) with pentachlorophenol (PCP). Historically, power poles may have been untreated cedar poles or pre-treated (by manufacturer) with PCP, creosote, or other common wood preservatives. For further information on power poles, see the separate 104(e) response for Miscellaneous Spills, Distribution Network, and Submerged Cables.</p> <p><u>West Equipment Storage Yard</u> From 1992 to 2002, new and non-leaking surplus (used) equipment (e.g., transformers, skid-mounted oil tanks, and capacitors) with < 500 ppm PCBs were stored in this area. Since 2002, non-leaking surplus (used) equipment with < 50 ppm PCBs is stored in this area. Electrical equipment that does not contain oil (e.g., battery houses) is also stored in this area.</p>	

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	<p>In addition, there was historically a submerged cable terminal located near the southern boundary of Parcel A prior to 1997. PGE activities were limited to the initial construction, maintenance (as needed), and removal of an associated above ground oil tank after it was vandalized in 1997. For more information, see the separate 104(e) response for Miscellaneous Spills, Distribution Network, and Submerged Cables.</p> <p>For further details on PGE activities and operations on the Harborton Substation (Parcel A), see the documents (Q15_1999 Response to DEQ Strat.pdf, Q15_1998-07-06 Phase I Env Site Assessment.pdf, Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf and Q15_1973 PGE Environmental Report.pdf) attached in response to Question 15. Also see the response to Question 13k for a summary of significant developments/modifications at the Harborton Substation (Parcel A).</p> <p><u>Parcels B through G Activities</u></p> <p>Parcel B is an undeveloped, vegetated low-lying area north of Harborton Substation (Parcel A). PGE has not conducted and does not conduct any activities or operations on this parcel.</p> <p>Parcel C is relatively undeveloped and is used for PGE's electrical transmission lines. In addition, the historical 14-inch fuel pipeline that connected the ASTs at Parcel A to the GP dock passed through the parcel.</p> <p>Parcels D through G are relatively undeveloped and are only used for PGE's electrical transmission lines, switching anchors, and cable terminals. To the best of PGE's knowledge, after reasonable inquiry, PGE activities were/are limited to the initial construction and continued maintenance, as needed, of the transmission lines.</p> <p><u>Parcel H Activities</u></p> <p>To the best of PGE's knowledge, after reasonable inquiry, during PGE's historical ownership (1939 to 1962), PGE only used the parcel for the electrical transmission lines.</p>	
6. Identify any persons who concurrently with you exercises or exercised actual control or who held significant authority to control activities at each Property, including:		
a. partners or joint ventures;	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, no known partners or joint ventures have exercised actual control or held significant authority to control activities at the Harborton Substation (Parcel A) or the other PGE-owned parcels (Parcels B through H).	

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<p>b. any contractor, subcontractor, or licensor that exercised control over any materials handling, storage, or disposal activity on the Property; (service contractors, remediation contractors, management and operator contractors, licensor providing technical support to licensed activities);</p>	<p>A US Army Corp of Engineers Dredge and Fill Permit issued to a nearby property (Georgia-Pacific), indicated that the northwest portion of the Harborton Substation (Parcel A) was at least partially filled-in with river sediments that were dredged from along the full length of the shoreline between the southeastern corner of the site and the northeastern corner of the former Kingsley Lumber Company Mill. See the document (Q52_Winter of 1971 & 1972_2nd Dredging and Fill Documents.pdf) attached in response to Question 52 and the documents (Q13k_Fall 1971_1st Diking and Fill Documents.pdf, Q13k_1972-12-18 Harborton Site Fill Authorization.pdf, Q13k_1971-01-07 Sediment movement memo.pdf and Q13k_1971-01-06 dredging fill placement memo.pdf) attached in response to Question 13k. To the best of PGE's knowledge, after reasonable inquiry, Crosswhite Enterprises furnished all labor, equipment and supervision to move the sediment that was deposited on the property by the Port of Portland. The Port was not able to provide the full quantity of fill material that PGE required. Additional fill material was placed at Harborton Substation (Parcel A) in 1986 by the Oregon Department of Transportation (ODOT); see the documents (Q52_1986 COP Greenway Permitfill.pdf and Q52_1986 OSHD Fill Permit.pdf) attached in response to Question 52.</p> <p>Since 1972, environmental consultants and contractors have conducted a series of environmental investigations or demolition/scraping activities at Harborton Substation (Parcel A). These consultants include:</p> <ul style="list-style-type: none"> • EMCON • Bridgewater Group, Inc (Bridgewater Group) – Environmental investigations • Hahn & Associates, Inc (HAI) – Environmental investigations • Dames & Moore – Environmental investigations • HAZCOM – Asbestos survey • Forensic Analytical Inc – Asbestos survey • Cliff Koppe Metals Inc – Metals scraping <p>To the best of PGE's knowledge, after reasonable inquiry, no consultants or subcontractors have exercised control over any materials handling, storage, or disposal activities, if any, at the other PGE-owned parcels (Parcels B through G).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, no consultants or subcontractors exercised control over any materials handling, storage, or disposal activities, if any, at Parcel H during PGE's historical ownership (1939 to 1962).</p>	<p>See Question 13 Attachments Q13k_Fall 1971_1st Diking and Fill Documents.pdf Q13k_1972-12-18 Harborton Site Fill Authorization.pdf Q13k_1971-01-07 Sediment movement memo.pdf Q13k_1971-01-06 dredging fill placement memo.pdf</p> <p>Also see Question 52 Attachments Q52_1986 COP Greenway Permitfill.pdf Q52_1986 OSHD Fill Permit.pdf Q52_Winter of 1971 & 1972_2nd Dredging and Fill Documents.pdf</p>
<p>c. any person subleasing land, equipment or space on the Property;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the following leases and subleases of land, equipment or space occurred on Parcels A through H during PGE's ownership:</p> <p><u>Aquatic Lands Subleases (adjacent to Parcels A and B)</u> PGE subleased the aquatic lands along the Harborton Substation (Parcel A) and/or Parcel B to other companies.</p> <ul style="list-style-type: none"> • When PGE purchased Parcels A and B, PGE assumed the aquatic lands sublease that was granted to the Blue Lake Boom Company Inc by the previous owner, Peninsula Agencies Inc; see the document (Q07_Penninsula Sublease to Blue Lake Boom 	<p>See Question 4 Attachments Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 2.pdf</p> <p>Also see Question 7 Attachments <u>Aquatic Land Subleases</u> Q07_Blue Lake Boom Sublease to Mirene 1968.pdf Q07_Mirene Sublease Transfer to Knappton 1985.pdf Q07_Penninsula Sublease to Blue Lake Boom 1965.pdf Q07_PGE Sublease to Brix Maritime 1990-1995.pdf</p>

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	<p>1965.pdf) attached in response to Question 7. The 5-year sublease, with the option for yearly renewals, was granted on 1 October 1965 and gave the Blue Lake Boom Company Inc the right to moor log rafts, boom and sort logs, with the right to operate log booms, together with the installation/construction of necessary piling and dolphins.</p> <ul style="list-style-type: none"> • The Blue Lake Boom Company Inc transferred its sublease to the Mirene Company on 1 January 1969; see the document (Q07_Blue Lake Boom Sublease to Mirene 1968.pdf) attached in response to Question 7. • On 1 September 1971, PGE granted GP a use agreement for the aquatic lands in front of Harborton Substation (Parcel A); see the document (Q07_PGE-GP Agmt for Dolphin Use 1971.pdf) attached in response to Question 7. PGE granted GP the right (insofar as PGE may grant such right) to dredge in the Willamette River in front of Parcels A and B and to lease 300 feet of Parcel A in order to construct, reconstruct, and maintain a moorage facility. The term of the lease was for a period of 5 years, with the lease continuing year-to-year thereafter. In 1980, the agreement was revised/renewed, reducing the leased aquatic lands for the moorage facility to 50 feet; see the document (Q07_PGE-GP Agreement 1980.pdf) attached in response to Question 7. This moorage facility agreement was renewed in 1995, extending the agreement to 1 July 2000; see the document (Q07_Letter Regarding GP Agmt Renewal 1995.pdf) attached in response to Question 7. • PGE granted a 1-year sublease, with the option for yearly renewals, to the Mirene Company on 1 August 1976 for the aquatic lands adjacent to Parcels A and B; see the document (Q07_PGE Sublease to Mirene 1976.pdf) attached in response to Question 7. The sublease granted the Mirene Company the right to moor log rafts, boom and sort logs, with the right to operate log booms, together with the construction/maintenance of necessary piling and dolphins. • The Mirene Company transferred its interest in the 1 August 1976 sublease to the Knappton Corporation on 29 May 1985; see the document (Q07_Mirene Sublease Transfer to Knappton 1985.pdf) attached in response to Question 7. • PGE granted a 5-year sublease, with two 5-year options for renewal, to the Knappton Corporation on 1 August 1985; see the document (Q07_PGE Sublease to Knappton 1986.pdf) attached in response to Question 7. The sublease granted the Knappton Corporation the right to store log rafts on the aquatic lands adjacent to Parcels A and B. • PGE granted a 5-year renewal sublease to Brix Maritime Company (previously the Knappton Corporation) on 1 August 1990; see the document (Q07_PGE Sublease to Brix Maritime 1990-1995.pdf) attached in response to Question 7. 	<p>Q07_PGE Sublease to Knappton 1986.pdf Q07_PGE Sublease to Mirene 1976.pdf Q07_PGE-GP Agmt for Dolphin Use 1971.pdf Q07_PGE-GP Agreement 1980.pdf Q07_Letter Regarding GP Agmt Renewal 1995.pdf</p> <p><u>Leases</u></p> <p>Q07_PGE Lease to CP 1991.pdf Q07_PGE Lease to McCall Oil 1978.pdf Q07_PGE Lease to McCall Oil 1980.pdf Q07_PGE – CP Lease Synopsis.pdf</p> <p><u>Agreements/Permits</u></p> <p>Q07_1951 COP Ord. 93860.pdf Q07_1952 COP Ord. 97158.pdf, Q07_1962-01-18 COP to PGE.pdf Q07_PGE-SPPL Pipeline Agrmt 1973.pdf Q07_PGE-GATX Fuel Transfer Agmt 1981.pdf Q07_PGE-COP Access Agmt 1996.pdf Q07_PGE-Olympic Agmt for Gates 2008.pdf</p>

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	<p><u>Leases (Parcel A)</u> PGE leased the ASTs and associated pipelines/facilities at the Harborton Substation (Parcel A) to several companies.</p> <ul style="list-style-type: none"> On 17 November 1978, PGE leased AST #1 and associated pipelines to McCall Oil and Chemical Corporation for fuel storage for a period of one month beginning 10 December 1978; see the document (Q07_PGE Lease to McCall Oil 1978.pdf) attached in response to Question 7. Although PGE entered into this lease, to the best of PGE's knowledge, after reasonable inquiry, McCall Oil and Chemical Corporation did not exercise its option to store product in the ASTs. On 22 October 1980, PGE again leased AST #1 and its associated pipelines to McCall Oil and Chemical Corporation for a period of one month beginning 27 October 1980; see the document (Q07_PGE Lease to McCall Oil 1980.pdf) attached in response to Question 7. Although PGE entered into this lease, to the best of PGE's knowledge, after reasonable inquiry, McCall Oil and Chemical Corporation did not exercise its option to store product in the ASTs. On 10 December 1991, PGE granted a 5-year lease to Columbia Petroleum Company (CP) for a portion of Harborton Substation (the former distillate fuel tank area, the fuel transfer station, and the majority of the west equipment storage area) and use of the associated piping within Parcel A and within the OFTG; see the documents (Q07_PGE Lease to CP 1991.pdf and Q07_PGE – CP Lease Synopsis.pdf) attached in response to Question 7. Under the terms of the lease, CP was granted permission to receive, store, handle, process, blend, transport, and ship asphalt products and to modify the tanks and associated pipelines accordingly. Extensive modifications to the tanks and pipelines had already begun when it was determined that CP was in violation of the PGE lease agreement and the COP permits. The lease was terminated on 30 March 1992. PGE requested that CP vacate the Harborton Substation and return the ASTs and piping back to operable condition by 31 December 1992; see the document (Q07_1992-10-27 PGE Request to CP to vacate.pdf) attached in response to Question 7. For further details, see the response to Questions 4h and 7. <p><u>Agreements/Permits (Parcels A and H)</u></p> <ul style="list-style-type: none"> Sometime prior to 1962, PGE granted the COP a revocable permit under Ordinance No. 93860, as amended by Ordinance No. 94042, for the right to occupy Parcel H; see the documents (Q07_1951 COP Ord. 93860.pdf, Q07_1952 COP Ord. 97158.pdf, and Q07_1962-01-18 COP to PGE.pdf) attached in response to Question 7. The permit granted the COP the right to occupy Parcel H in connection with the operation and maintenance of the adjacent OFTG facility. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know when this permit was issued; however, it is likely to have occurred sometime around 1951 when the COP began operations/activities at the adjacent OFTG. To the best of PGE's knowledge, after 	

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	<p>reasonable inquiry, the COP had a water storage tank and piping valves, a fence and gate, and/or water lines on Parcel H but did not use the parcel for any actual firefighting training activities. The COP released/waived its permit in January 1962 on behalf of the Oregon State Highway, in order for the Oregon State Highway to procure Parcel H from PGE for construction of the Columbia River Highway.</p> <ul style="list-style-type: none"> On 10 September 1973, PGE and Southern Pacific Pipelines (SSPL) signed an agreement regarding the construction, operations, and maintenance of fuel delivery facilities for product delivery to the ASTs at the Harborton Substation; see the document (Q07_PGE-SPPL Pipeline Agrmt 1973.pdf) attached in response to Question 7. On 16 September 1981, PGE entered into a Pipeline Transfer Agreement with GATX Tank Storage Terminals Corporation (GATX). This agreement provided for pipeline transfer of diesel fuel through GATX pipelines to SPPL pipelines to Harborton Substation; see the document (Q07_PGE-GATX Fuel Transfer Agmt 1981.pdf) attached in response to Question 7. From 31 January 1997 to 1 November 1998, PGE granted the COP an agreement to install and maintain two gates located at either end of PGE's Parcel C during the remediation activities at the BPA-owned OFTG, which were conducted by the COP; see the document (Q07_PGE-COP Access Agmt 1996.pdf) attached in response to Question 7. On 5 November 2008, PGE signed a land use agreement with Olympic Pipe Line to allow Olympic Pipe Line to build two gates across the 30-ft portion of the Olympic Pipe Line easement along the western side of Parcel A; see the document (Q07_PGE-Olympic Agmt for Gates 2008.pdf) attached in response to Question 7. <p>Also see the documents (Q04a_Harborton Plat 1.pdf and Q04a_Harborton Plat 2.pdf) attached in response to Question 4a.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, PGE has not granted any subleases for land, equipment, or space on Parcels B through G.</p>	
<p>d. utilities, pipelines, railroads and any other person with activities and/or easements regarding the Property;</p>	<p>The document (Q04a_Harborton Plat 2.pdf) attached in response to Question 4a shows the two pipeline easements on Parcels A and B. To the best of PGE's knowledge, after reasonable inquiry, the following easements were on the Harborton Substation (Parcel A) and Parcel B:</p> <ul style="list-style-type: none"> When PGE purchased the Harborton Substation (Parcel A) and Parcel B in 1968, PGE assumed the existing easement to the Olympic Pipe Line Company for the 14-inch diameter oil and gas pipeline, which was originally granted by the previous property owner, Peninsula Agencies Inc on 22 July 1964; see the document (Q07_Peninsula Easement to Olympic 1964.pdf) attached in response to Question 7. On 6 June 1965, PGE renewed the easement to the Olympic Pipe Line Company for the maintenance 	<p>See Question 4 Attachment Q04a_Harborton Plat 2.pdf</p> <p>Also see Question 7 Attachments Q07_Peninsula Easement to Olympic 1964.pdf Q07_PGE Easement to Olympic Pipeline 1965.pdf Q07_PGE Easement to Pacific Fiber Link 1998.pdf</p>

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	<p>and operation of the pipeline; see the document (Q07_PGE Easement to Olympic Pipeline 1965.pdf) attached in response to Question 7. The pipeline runs along the southwestern edge of the Harborton Substation (Parcel A), next to a railroad spur, and through the northwestern portion of Parcel B.</p> <ul style="list-style-type: none"> On 28 September 1998, PGE granted an easement to Pacific Fiber Link LLC for a communications conduit in the Harborton Substation (Parcel A) and Parcel B, located along the side of the Olympic Pipe Line Company easement; see the document (Q07_PGE Easement to Pacific Fiber Link 1998.pdf) attached in response to Question 7. <p>The Harborton Substation (Parcel A) is connected to water and telephone utilities and was historically connected to a natural gas utility, with utility connections located in the adjacent streets. To the best of PGE's knowledge, after reasonable inquiry, the companies that provide these utility services do not have easements or activities on the Harborton Substation (Parcel A).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, there are no easements or non-PGE utilities on Parcels B through H.</p>	
e. major financiers and lenders;	Not applicable. None have been identified.	
f. any person who exercised actual control over any activities or operations on the Property;	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE personnel (see the responses to Questions 6g and 6h), consultants and contractors (see the response to Question 6b), lessees (see the response to Question 6c), and companies with easements (see the response to Question 6d) have exercised actual control over activities or operations at Parcels A, B, and/or H.</p> <p>Parcels C through G are relatively undeveloped and are only used for the electrical transmission lines, switching anchors, and cable terminals. To the best of PGE's knowledge, after reasonable inquiry, PGE activities were/are limited to initial construction/installation and maintenance, as needed. To the best of PGE's knowledge, after reasonable inquiry, PGE only used the parcel for the electrical transmission lines during PGE's historical ownership (1939 to 1962).</p>	
g. any person who held significant authority to control any activities or operations on the Property;	<p>Multiple individuals have had authority within PGE to access and conduct activities on the Harborton parcels (Parcels A through G) and the historically owned Parcel H. Many are listed in the following documents:</p> <ul style="list-style-type: none"> Bullseye articles 1967, 1971, 1973 and 1980. Organizational charts for the years: 1980, 1982, 1984, 1986, 1988, 1989, 1990, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, and 2005 Distribution and System Planning information. Management structure information 1982-2007. <p>In addition, the consultants and contractors (see the response to Question 6b), lessees (see the response to Question 6c), and companies with easements (see the response to Question 6d)</p>	<p>Question 6 Attachments Q06g_Bullseye Articles.pdf Q06g_Organizational Charts.pdf Q06g_Distribution and System Planning Information.pdf Q06g_HRIC Structure Report 2008.pdf Q06g_HRIC Structure Info 1982-2007.pdf</p>

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	have had the authority to control activities or operations at Parcels A, B, and/or H.	
h. any person who had a significant presence or who conducted significant activities at the Property; and	<p>Multiple individuals have had authority within PGE to access and conduct activities on the Harborton parcels (Parcels A through G) and the historically owned Parcel H. Many are listed in the documents attached in response to Question 6g:</p> <ul style="list-style-type: none"> • Bullseye articles 1967, 1971, 1973 and 1980. • Organizational charts for the years: 1980, 1982, 1984, 1986, 1988, 1989, 1990, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, and 2005 • Distribution and System Planning information. • Management structure information 1982-2007. <p>See the documents attached in response to Question 6g.</p> <p>In addition, the consultants and contractors (see the response to Question 6b), lessees (see the response to Question 6c), and companies with easements (see the response to Question 6d) have had a significant presence or conducted significant activities at Parcels A, B, and/or H.</p>	<p>Question 6 Attachments</p> <p>Q06g_Bullseye Articles.pdf Q06g_Organizational Charts.pdf Q06g_Distribution and System Planning Information.pdf Q06g_HRIC Structure Report 2008.pdf Q06g_HRIC Structure Info 1982-2007.pdf</p>
i. government entities that had proprietary (as opposed to regulatory) interest or involvement with regard to the activity on the Property.	<p>To the best of PGE's knowledge, after reasonable inquiry, the only government entities that had a proprietary interest or involvement at the Harborton Substation (Parcel A) and Parcel B were the Multnomah County Sheriff and Multnomah County. To the best of PGE's knowledge, after reasonable inquiry, Parcels A and B were owned by the Multnomah County Sheriff prior to 18 June 1942 and by Multnomah County from 18 June 1942 to 15 December 1954; see the document (Q10_RecordedDocSearch.pdf) attached in response to Question 10.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, no government entities have (or had) a proprietary interest or involvement at the Parcels C through G.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, the only government entities that had involvement at Parcel H were the COP and the Oregon State Highway Department. From approximately 1951 to 1962, PGE granted the COP a permit under Ordinance No. 93860, as amended by Ordinance No. 94042, for the right to occupy Parcel H; see the response and documents (Q07_1951 COP Ord. 93860.pdf, Q07_1952 COP Ord. 97158.pdf, and Q07_1962-01-18 COP to PGE.pdf) attached for Question 7. On 19 June 1962, PGE conveyed Parcel H to the Oregon State Highway Department; see the document (Q07_Deed PGE to Oregon State Highway 1962.pdf) attached in response to Question 7.</p>	<p>See Question 10 Attachment</p> <p>Q10_RecordedDocSearch.pdf</p> <p>Also see Question 7 Attachments</p> <p>Q07_1951 COP Ord. 93860.pdf Q07_1952 COP Ord. 97158.pdf Q07_1962-01-18 COP to PGE.pdf Q07_Deed PGE to Oregon State Highway 1962.pdf</p>
Section 2.0 - Owner/Operator Information (continued)		
7. Identify and describe any legal or equitable interest that you now have, or previously had in each Property. Include information regarding the nature of such interest: when, how, and from whom such	The document (Q04_Harborton Location Map.pdf) attached in response to Question 4 shows the relative locations of the Harborton parcels (Parcels A to G) and the historically owned Parcel H. The plats (Q04a_Harborton Plat 1.pdf, Q04a_Harborton Plat 2.pdf, and Q04a_Harborton Plat 3.pdf) attached in response to Question 4a indicate when and from whom Parcels A through H were purchased. To the best of PGE's knowledge, after reasonable inquiry, the following deeds, leases, easements, and other agreements relate to the Harborton parcels	<p>Question 7 Attachments</p> <p><u>Deeds</u></p> <p>Q07_Deed Gatton to PGE 1939.pdf Q07_Deed Western Timber to PGE 1939.pdf Q07_Deed Strike to PGE 1944.pdf Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf</p>

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<p>interest was obtained; and when, how, and to whom such interest was conveyed, if applicable. In addition, submit copies of all instruments evidencing the acquisition or conveyance of such interest (e.g., deeds, leases, purchase and sale agreements, partnership agreements, etc.). Also provide all information and documentation regarding, but not limited to the following:</p>	<p>(Parcels A through G) and Parcel H:</p> <p><u>Deeds (Parcels A through G)</u></p> <ul style="list-style-type: none"> The Harborton Substation (Parcel A) and Parcel B were purchased by PGE from Peninsula Agencies Inc on 21 October 1968; see the attached deed (Q07_Deed Peninsula to PGE 1968.pdf). Parcels C and D were purchased by PGE from the Western Timber Company on 11 August 1939; see the attached deed (Q07_Deed Western Timber to PGE 1939.pdf). Parcel E was purchased by PGE from Harry and Esme Meredith on 4 April 1975; see the attached deed (Q07_Deed Meredith to PGE 1975.pdf). The majority of Parcel F (1.3 acres) was purchased from the Gatton Estate on 9 September 1939; see the attached deed (Q07_Deed Gatton to PGE 1939.pdf). The small northern portion of the parcel (0.13 acres) was acquired by PGE on 18 October 1954 from the Portland Manufacturing Company; see the attached deed (Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf). Parcel G was purchased by PGE from Garfield and Wilma Strike on 8 September 1944; see the attached deed (Q07_Deed Strike to PGE 1944.pdf). On 11 August 1939, PGE purchased Parcel H; see the attached deed (Q07_Deed Western Timber to PGE 1939.pdf). PGE conveyed Parcel H to the Oregon State Highway on 19 June 1962; see the attached deed (Q07_Deed PGE to Oregon State Highway 1962.pdf). <p><u>Aquatic Lands Leases (Parcels A and B)</u></p> <ul style="list-style-type: none"> On 1 May 1976, PGE was granted a 10-year aquatic lands lease from DSL for a 3,500-foot long by 150-foot wide stretch of aquatic lands along Harborton Substation (Parcel A) and Parcel B; see the attached document (Q07_1976-1986 DSL Aquatic Lands Lease.pdf). On 1 May 1986, PGE was granted another 10-year aquatic lands lease from DSL for the 3,500-foot long by 150-foot wide stretch of aquatic lands along Parcels A and B; see the attached document (Q07_1986-1996 DSL Aquatic Lands Lease.pdf). On 1 May 1996, PGE was granted a 20-year aquatic lands lease from DSL; however, the lease was reduced to a 3,500-foot long by 50-foot wide stretch of aquatic land along Parcels A and B; see the attached document (Q07_1996-2015 DSL Aquatic Lands Lease.pdf). <p><u>Aquatic Lands Subleases (Parcels A and B)</u></p> <p>PGE subleased the aquatic lands along the Harborton Substation (Parcel A) and/or Parcel B to</p>	<p>Q07_Deed PGE to Oregon State Highway 1962.pdf Q07_Deed Peninsula to PGE 1968.pdf Q07_Deed Meredith to PGE 1975.pdf</p> <p><u>Aquatic Land Leases</u></p> <p>Q07_1976-1986 DSL Aquatic Lands Lease.pdf Q07_1986-1996 DSL Aquatic Lands Lease.pdf Q07_1996-2015 DSL Aquatic Lands Lease.pdf</p> <p><u>Aquatic Land Subleases</u></p> <p>Q07_Blue Lake Boom Sublease to Mirene 1968.pdf Q07_Mirene Sublease Transfer to Knappton 1985.pdf Q07_Penninsula Sublease to Blue Lake Boom 1965.pdf Q07_PGE Sublease to Brix Maritime 1990-1995.pdf Q07_PGE Sublease to Knappton 1986.pdf Q07_PGE Sublease to Mirene 1976.pdf Q07_PGE-GP Agmt for Dolphin Use 1971.pdf Q07_PGE-GP Agreement 1980.pdf Q07_Letter Regarding GP Agmt Renewal 1995.pdf</p> <p><u>Leases</u></p> <p>Q07_PGE Lease to McCall Oil 1978.pdf Q07_PGE Lease to McCall Oil 1980.pdf Q07_Info for PGE Lease to Arrasmith 1983.pdf Q07_1980 PP&LPuget Sound Agreement.pdf Q07_PGE Lease to CP 1991.pdf Q07_PGE – CP Lease Synopsis.pdf Q07_1992-01-02 CP Letter to PGE.pdf Q07_1992-01-14 PGE Letter to CP.pdf Q07_1992-04-28 CP Letter to PGE.pdf Q07_1992-05-26 PGE Letter to CP.pdf Q07_1992-10-27 PGE Request to CP to vacate.pdf</p> <p><u>Easements</u></p> <p>Q07_Penninsula Easement to Olympic 1964.pdf Q07_PGE Easement to Olympic Pipeline 1965.pdf Q07_PGE Easement to Pacific Fiber Link 1998.pdf</p> <p><u>Agreements/Permits</u></p> <p>Q07_1951 COP Ord. 93860.pdf Q07_1952 COP Ord. 97158.pdf Q07_1962-01-18 COP to PGE.pdf Q07_PGE-SPPL Pipeline Agrmt 1973.pdf Q07_PGE-GATX Fuel Transfer Agmt 1981.pdf</p>

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EPA Question	Response	Records/Information Available
	<p>other companies.</p> <ul style="list-style-type: none"> When PGE purchased Parcels A and B, PGE assumed the aquatic lands sublease that was granted to the Blue Lake Boom Company Inc by the previous owner, Peninsula Agencies Inc; see the attached document (Q07_Penninsula Sublease to Blue Lake Boom 1965.pdf). The 5-year sublease, with the option for yearly renewals, was granted on 1 October 1965 and gave the Blue Lake Boom Company Inc the right to moor log rafts, boom and sort logs, with the right to operate log booms, together with the installation/construction of necessary piling and dolphins. The Blue Lake Boom Company Inc transferred its sublease to the Mirene Company on 1 January 1969; see the attached document (Q07_Blue Lake Boom Sublease to Mirene 1968.pdf). On 1 September 1971, PGE granted GP a use agreement for the aquatic lands in front of Harborton Substation (Parcel A); see the attached document (Q07_PGE-GP Agmt for Dolphin Use 1971.pdf). PGE granted GP the right (insofar as PGE may grant such right) to dredge in the Willamette River in front of Parcels A and B and to lease 300 feet of Parcel A in order to construct, reconstruct, and maintain a moorage facility. The term of the lease was for a period of 5 years, with the lease continuing year-to-year thereafter. In 1980, the agreement was revised/renewed, reducing the leased aquatic lands for the moorage facility to 50 feet; see the attached document (Q07_PGE-GP Agreement 1980.pdf). This moorage facility agreement was renewed in 1995, extending the agreement to 1 July 2000; see the attached document (Q07_Letter Regarding GP Agmt Renewal 1995.pdf). PGE granted a 1-year sublease, with the option for yearly renewals, to the Mirene Company on 1 August 1976 for the aquatic lands adjacent to Parcels A and B; see the attached document (Q07_PGE Sublease to Mirene 1976.pdf). The sublease granted the Mirene Company the right to moor log rafts, boom and sort logs, with the right to operate log booms, together with the construction/maintenance of necessary piling and dolphins. The Mirene Company transferred its interest in the 1 August 1976 sublease to the Knappton Corporation on 29 May 1985; see the attached document (Q07_Mirene Sublease Transfer to Knappton 1985.pdf). PGE granted a 5-year sublease, with two 5-year options for renewal, to the Knappton Corporation on 1 August 1985; see the attached document (Q07_PGE Sublease to Knappton 1986.pdf). The sublease granted the Knappton Corporation the right to store log rafts on the aquatic lands adjacent to Parcels A and B. PGE granted a 5-year renewal sublease to Brix Maritime Company (previously the Knappton Corporation) on 1 August 1990; see the attached document (Q07_PGE 	<p>Q07_PGE-COP Access Agmt 1996.pdf Q07_2000 COP Entry Permit.pdf Q07_PGE-Olympic Agmt for Gates 2008.pdf</p> <p><u>Other Arrangements</u></p> <p>Q07_1968 Willamette Tug and Barge Fill Request.pdf Q07_1977 GATX Lease Potential.pdf Q07_1981 CU App Greenway.pdf Q07_PGE Purch Opt to Willamette Sailing 1980.pdf</p> <p>Also see Question 4 Attachments</p> <p>Q04_Harborton Location Map.pdf Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 2.pdf Q04a_Harborton Plat 3.pdf Q04h_1973-10-10 PGE-BPA Pipeline Permit.pdf Q04h_1991-11-20 CP Letter to PGE.pdf Q04h_1992-04-14 COP Stop Work Order & Follow Up.pdf Q04h_1992-04-16 COP to NFS.pdf Q04h_1992-05-08 BPA Letter to PGE.pdf Q04h_1992-06-01 BPA Letter to PGE.pdf Q04h_1992-06-16 PGE Letter to BPA.pdf Q04h_1992-07-22 CP Appeal to COP.pdf Q04h_CP - COP Correspondence 1992-08.pdf Q04h_1992-08-05 BPA Permit to PGE.pdf Q04h_1992-08-13 PGE Letter to BPA.pdf Q04h_1993-03-30 PGE Letter to BPA.pdf Q04h_1994-01-10 BPA Permit Renewal to PGE.pdf Q04h_1994-08-05 BPA Letter to PGE.pdf Q04h_1999-01-22 BPA Letter to PGE.pdf Q04h_1999-03-09 BPA Easement to PGE.pdf Q04h_2002-10-31 DOJ Letter to PGE.pdf Q04h_2003-06-05 PGE Letter to BPA.pdf</p>

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	<p style="text-align: center;">Sublease to Brix Maritime 1990-1995.pdf).</p> <p><u>Leases (Parcel A)</u> PGE leased the ASTs and associated pipelines/facilities at the Harborton Substation (Parcel A) to several companies. Although PGE entered into these leases, to the best of PGE's knowledge, after reasonable inquiry, none of the lessees exercised their options to store product in the ASTs.</p> <ul style="list-style-type: none"> On 17 November 1978, PGE leased AST #1 and associated pipelines to McCall Oil and Chemical Corporation for fuel storage for a period of one month beginning 10 December 1978; see the attached document (Q07_PGE Lease to McCall Oil 1978.pdf). Although PGE entered into these leases, to the best of PGE's knowledge, after reasonable inquiry, McCall Oil and Chemical Corporation did not exercise their option to store product in the ASTs. On 22 October 1980, PGE again leased AST #1 and its associated pipelines to McCall Oil and Chemical Corporation for a period of one month beginning 27 October 1980; see the attached document (Q07_PGE Lease to McCall Oil 1980.pdf). Although PGE entered into these leases, to the best of PGE's knowledge, after reasonable inquiry, McCall Oil and Chemical Corporation did not exercise their option to store product in the ASTs Based on the attached document (Q07_1980 PP&LPuget Sound Agreement.pdf), PGE appears to have had a verbal agreement with PP&L and Puget Sound Power & Light to store product in the ASTs in 1980. The document states that the ASTs were approximately 50% utilized. However, to the best of PGE's knowledge after reasonable inquiry, PGE does not have any lease documents or further knowledge to substantiate this use of the ASTs. On 11 July 1983, PGE granted an Option to Lease to ATG for the Fuel Oil Tank Farm, including the ASTs; see the attached document (Q07_Info for PGE Lease to Arrasmith.pdf). This agreement allowed ATG the option to lease the ASTs and associated facilities for a period of 30 days. However, to the best of PGE's knowledge, after reasonable inquiry, this option was never exercised. On 10 December 1991, PGE granted a 5-year lease to CP for a portion of Harborton Substation (the former distillate fuel tank area, the fuel transfer station, and the majority of the west equipment storage area) and use of the associated piping within Parcel A and within the OFTG; see the attached documents (Q07_PGE Lease to CP 1991.pdf and Q07_PGE – CP Lease Synopsis.pdf). Under the terms of the lease, CP was granted permission to receive, store, handle, process, blend, transport, and ship asphalt products and to modify the tanks and associated pipelines accordingly. Extensive modifications to the tanks and pipelines had already begun when it was determined that CP was in violation of the PGE lease agreement and the COP 	

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	<p>permits. The lease was terminated on 30 March 1992. PGE requested that CP vacate the Harborton Substation and return the ASTs and piping back to operable conditions by 31 December 1992. See the attached documents (Q07_1992-01-02 CP Letter to PGE.pdf, Q07_1992-01-14 PGE Letter to CP.pdf, Q07_1992-04-28 CP Letter to PGE.pdf, Q07_1992-05-26 PGE Letter to CP.pdf, and Q07_1992-10-27 PGE Request to CP to vacate.pdf). For further details about the OFTG, see the response and documents attached for Question 4h.</p> <p><u>Easements (Parcels A and B)</u></p> <ul style="list-style-type: none"> When PGE purchased the Harborton Substation (Parcel A) and Parcel B in 1968, PGE assumed the existing easement to the Olympic Pipe Line Company for the 14-inch diameter oil and gas pipeline, which was originally granted by the previous property owner, Peninsula Agencies Inc on 22 July 1964; see the attached document (Q07_Peninsula Easement to Olympic 1964.pdf). On 6 June 1965, PGE renewed the easement to the Olympic Pipe Line Company for the maintenance and operation of the pipeline; see the attached document (Q07_PGE Easement to Olympic Pipeline 1965.pdf). The pipeline runs along the southwestern edge of the Harborton Substation (Parcel A), next to a railroad spur, and through the northwestern portion of Parcel B. On 28 September 1998, PGE granted an easement to Pacific Fiber Link LLC for a communications conduit in the Harborton Substation (Parcel A) and Parcel B, located along the side of the Olympic Pipe Line Company easement; see the attached document (Q07_PGE Easement to Pacific Fiber Link 1998.pdf). <p><u>Agreements/Permits (Parcels A and H)</u></p> <ul style="list-style-type: none"> In 1951, PGE granted the COP a revocable permit under Ordinance No. 93860, as amended by Ordinance No. 94042, for the right to occupy Parcel H; see the attached documents (Q07_1951 COP Ord. 93860.pdf, Q07_1952 COP Ord. 97158.pdf, and Q07_1962-01-18 COP to PGE.pdf). The permit granted the COP the right to occupy Parcel H in connection with the operation and maintenance of the adjacent OFTG facility. To the best of PGE's knowledge, after reasonable inquiry, this permit was likely issued sometime around 1951 when the COP began operations/activities at the adjacent OFTG. To the best of PGE's knowledge, after reasonable inquiry, the COP had a water storage tank and piping valves, a fence and gate, and/or water lines on Parcel H but did not use the parcel for any actual firefighting training activities. The COP released/waived its permit in January 1962 on behalf of the Oregon State Highway, in order for the Oregon State Highway to procure Parcel H from PGE for construction of the Columbia River Highway. On 10 September 1973, PGE and SSPL signed an agreement regarding the construction, operations, and maintenance of fuel delivery facilities for product delivery to the ASTs at the Harborton Substation; see the attached document (Q07_PGE-SSPL Pipeline Agrmt 1973.pdf). 	

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	<ul style="list-style-type: none"> On 16 September 1981, PGE entered into a Pipeline Transfer Agreement with GATX. This agreement provided for pipeline transfer of diesel fuel through GATX pipelines to SPPL pipelines to Harborton Substation; see the attached document (Q07_PGE-GATX Fuel Transfer Agmt 1981.pdf). From 31 January 1997 to 1 November 1998, PGE granted the COP an agreement to install and maintain two gates located at either end of PGE's Parcel C during the remediation activities at the BPA-owned OFTG, which were conducted by the COP; see the attached document (Q07_PGE-COP Access Agmt 1996.pdf). On 28 February, 2000, PGE granted COP a one month entry agreement; see the attached document (Q07_2000 COP Entry Permit.pdf). The agreement granted COP and its consultants the right to enter onto the Harborton Substation (not within the fenced area) in order to conduct a visual survey as part of the Willamette River Greenway Plan Update. On 5 November 2008, PGE signed a land use agreement with Olympic Pipe Line to allow Olympic Pipe Line to build two gates across the 30-ft portion of the Olympic Pipe Line easement along the western side of Parcel A; see the attached document (Q07_PGE-Olympic Agmt for Gates 2008.pdf). <p><u>Other Arrangements (Parcel A)</u></p> <ul style="list-style-type: none"> In 1968, the Willamette Tug and Barge Company contacted PGE and requested to deposit fill material onto the Harborton Substation; see the attached document (Q07_1968 Willamette Tug and Barge Fill Request.pdf). To the best of PGE's knowledge after reasonable inquiry, the request was not granted. In 1977, GATX inquired about the possibility of leasing a 100-foot strip of land along the west side of the Harborton Substation; see the attached document (Q07_1977 GATX Lease Potential.pdf). To the best of PGE's knowledge after reasonable inquiry, the request was not granted. On 23 October 1980, the Willamette Sailing Club entered into an Option to Purchase arrangement with PGE for a portion of the Harborton Substation (Parcel A); see the attached documents (Q07_PGE Purch Opt to Willamette Sailing 1980.pdf and Q07_1981 CU App Greenway.pdf). To the best of PGE's knowledge, after reasonable inquiry, this option was never exercised. <p>Also see the responses to Questions 4 through 6, above.</p>	
a. any deeds and/or transfer information between Respondent and Dulien Steel Products;	Not applicable. Question 7a is relevant only to the Rivergate North Substation. Information regarding this question is provided in the 104(e) response letter for that site.	

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<p>b. deed and title information for Parcels R971340160, R971340180, R971350100, R971350480, R941191230, R971340130 and R971340200;</p>	<p>Parcels R971340130, R971340160, R971340180, R971350100, and R971340200 are five of the Harborton parcels:</p> <ul style="list-style-type: none"> Parcel A – R971340180; see the attached deed (Q07_Deed Penninsula to PGE 1968.pdf). Parcel C – R971340160; see the attached deed (Q07_Deed Western Timber to PGE 1939.pdf). Parcel E – R971340130; see the attached deed (Q07_Deed Meredith to PGE 1975.pdf). Parcel F – R971350100; see the attached deeds (Q07_Deed Gatton to PGE 1939.pdf and Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf). Parcel G – R971340200; see the attached deed (Q07_Deed Strike to PGE 1944.pdf). <p>The documents (Q04_Harborton Location Map.pdf, Q04a_Harborton Plat 1.pdf, Q04a_Harborton Plat 2.pdf, Q04a_Harborton Plat 3.pdf) attached in response to Question 4 illustrate where these five parcels are located and provide information on when they were purchased. Also see the responses to Questions 4, 5, and 7, above, as well as the documents (Q05c_Parcel A Property Details.pdf, Q05c_Parcel C Property Details.pdf, Q05c_Parcel E Property Details.pdf, Q05c_Parcel F Property Details.pdf, and Q05c_Parcel G Property Details.pdf) attached in response to Question 5.</p> <p>Parcel R971350480 is associated with the Rivergate North and South Substations and is addressed in the 104(e) response for that site. Parcel R941191230 is associated with a parcel that PGE historically owned and is addressed in PGE's 104(e) response for its Historical Properties.</p>	<p>Question 7 Attachments Q07_Deed Western Timber to PGE 1939.pdf Q07_Deed Gatton to PGE 1939.pdf Q07_Deed Strike to PGE 1944.pdf Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf Q07_Deed Penninsula to PGE 1968.pdf Q07_Deed Meredith to PGE 1975.pdf</p> <p>Also see Question 4 Attachments Q04_Harborton Location Map.pdf Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 2.pdf Q04a_Harborton Plat 3.pdf</p> <p>Also see Question 5 Attachments Q05c_Parcel A Property Details.pdf Q05c_Parcel C Property Details.pdf Q05c_Parcel E Property Details.pdf Q05c_Parcel F Property Details.pdf Q05c_Parcel G Property Details.pdf</p>
<p>c. a complete copy of the Memorandum of Contract Book 1292 p.616 for parcel R941191230, dated September 5, 1978;</p>	<p>Not applicable to the Harborton parcels (Parcels A through G) or Parcel H.</p>	
<p>8. If you are the current owner and/or current operator, did you acquire or operate the Property or any portion of the Property after the disposal or placement of hazardous substances, waste, or materials on, or at the Property? Describe all of the facts on which you base the answer to this question.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE did not know of, and had no reason to know of, any disposal or placement of hazardous substances, waste, or materials on or at any part of the Harborton parcels (Parcels A through G) or Parcel H that may have occurred prior to their acquisition by PGE. To the best of PGE's knowledge, after reasonable inquiry, no site investigations were performed on Parcels A through H prior to taking ownership.</p>	

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<p>9. At the time you acquired or operated the Property, did you know or have reason to know that any hazardous substance, waste, or material was disposed of on, or at the Property? Describe all investigations of the Property you undertook prior to acquiring the Property and all of the facts on which you base the answer to this question.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE did not know of, and had no reason to know of, any disposal or placement of hazardous substances, waste, or materials on or at any part of the Harborton parcels (Parcels A through G) or Parcel H that may have occurred prior to their acquisition by PGE. To the best of PGE's knowledge, after reasonable inquiry, no site investigations were performed on Parcels A through H prior to taking ownership.</p>	
<p>10. Identify all prior owners that you are aware of for each Property identified in Response to Question 4 above. For each prior owner, further identify if known:</p> <p>a. The dates of ownership</p> <p>b. All evidence showing that they controlled access to the Property</p> <p>c. All evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at the Property during the period that they owned the Property.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the following were prior owners for the Parcels A through H:</p> <p><u>Harborton Substation (Parcel A) and Parcel B</u> The prior owners of Parcels A and B are listed on the attached document (Q10_RecordedDocSearch.pdf) and summarized below:</p> <ul style="list-style-type: none"> On 18 June 1942, Multnomah County Sheriff conveyed title to Multnomah County; see the attached document (Q10_Sheriff to Multnomah County 1942.pdf). In August/September 1951, Multnomah County transferred the property under contract to Peninsula Mortgage Company; see the attached document (Q10_Agrmt Multnomah to Peninsula 1951.pdf). On 8 October 1951, Peninsula Mortgage Company assigned the contract to Edward and Ruth Doyle; see the attached document (Q10_Asgmt Doyle to Peninsula Mortgage 1951.pdf). On 15 December 1954, Multnomah County granted the deed for the property to Edward and Ruth Doyle; see the attached document (Q10_Deed Multnomah to Doyle 1954.pdf). On 22 December 1960, Ruth Doyle transferred the property under contract to Peninsula Agencies Inc; see the attached document (Q10_Contract Doyle to Peninsular Mort 1960.pdf). On 23 October 1968, Ruth Doyle conveyed the deed for the property to Peninsula Agencies Inc; see the attached document (Q10_Deed Doyle to Peninsular Agencies 1968.pdf). On 23 October 1968, Peninsula Agencies Inc sold the property to PGE; see the deed (Q07_Deed Peninsula to PGE 1968.pdf) attached in response to Question 7. <p><u>Parcels C through H</u></p> <ul style="list-style-type: none"> On 11 August 1939, Western Timber Company sold Parcels C, D, and H to PGE; see the deed (Q07_Deed Western Timber to PGE 1939.pdf) attached in response to Question 7. On 4 April 1975, Harry and Esme Meredith sold Parcel E to PGE; see the deed (Q07_Deed Meredith to PGE 1975.pdf) attached in response to Question 7. 	<p>Question 10 Attachments Q10_RecordedDocSearch.pdf Q10_Sheriff to Multnomah County 1942.pdf Q10_Deed Multnomah to Doyle 1954.pdf Q10_Asgmt Doyle to Peninsula Mortgage 1951.pdf Q10_Agrmt Multnomah to Peninsula 1951.pdf Q10_Contract Doyle to Peninsular Mort 1960.pdf Q10_Deed Doyle to Peninsular Agencies 1968.pdf Q10_Harborton Sanborn Maps.pdf</p> <p>Also see Question 4 Attachments Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 2.pdf Q04a_Harborton Plat 3.pdf</p> <p>Also see Question 7 Attachments Q07_Deed Gatton to PGE 1939.pdf Q07_Deed Western Timber to PGE 1939.pdf Q07_Deed Strike to PGE 1944.pdf Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf Q07_Deed Peninsula to PGE 1968.pdf Q07_Deed Meredith to PGE 1975.pdf</p>

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	<ul style="list-style-type: none">On 9 September 1939, the Gatton Estate sold the majority of Parcel F (1.3 acres) to PGE. The small northern portion of Parcel F (0.13 acres) was acquired by PGE on 18 October 1954 from the Portland Manufacturing Company. See the deeds (Q07_Deed Gatton to PGE 1939.pdf and Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf) attached in response to Question 7.On 8 September 1944, Garfield & Wilma Strike sold Parcel G to PGE; see the deed (Q07_Deed Strike to PGE 1944.pdf) attached in response to Question 7. <p>Also see the plats (Q04a_Harborton Plat 1.pdf, Q04a_Harborton Plat 2.pdf, and Q04a_Harborton Plat 3.pdf) attached in response to Question 4a. To the best of PGE's knowledge, after reasonable inquiry, PGE has no information regarding prior owner activities on the Harborton parcels (Parcels A through G) or Parcel H.</p> <p>On behalf of PGE, Hahn and Associates requested that EDR Environmental Data Resources Inc perform a search of the Sanborn Library collection for fire insurance maps of Parcels A through H. No insurance maps were found for these parcels. See the attached Sanborn Map report (Q10_Harborton Sanborn Maps.pdf), which documents this search.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, no site investigations were performed on the Harborton parcels (Parcels A through G) or Parcel H prior to PGE taking ownership. To the best of PGE's knowledge, after reasonable inquiry, no hazardous substance, pollutant, or contaminant was released or threatened to be released on Parcels A through H prior to PGE's acquisition.</p>	
11. Identify all prior operators of the Property, including lessors, you are aware of for each Property identified in response to Question 4 above. For each such operator, further identify if known:	To the best of PGE's knowledge, after reasonable inquiry, PGE does not have information regarding prior operations on the Harborton parcels (Parcels A through G) or the historically owned Parcel H other than the information contained in the responses to Questions 4 through 7 and Question 10, above. See the documents attached in response to Questions 4, 7, and Question 10.	See all Question 4 Attachments Also see all Question 7 Attachments Also see all Question 10 Attachments
a. the dates of operation;		
b. the nature of prior operations at the Property;		
c. all evidence that they controlled access to the Property; and		
d. all evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at or from the Property during the period that they were operating the Property		

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12. If not included in response to any of the previous questions, please describe the purpose and duration of each aquatic lands lease Respondent or the operator of Respondent's Property(ies) ever obtained from the State of Oregon and provide a copy of each application for and aquatic lands lease obtained.	<p>On 1 May 1976, PGE was granted a 10-year aquatic lands lease from the DSL for a 3,500-foot long by 150-foot wide stretch of aquatic lands along Harborton Substation (Parcel A) and Parcel B; see the document (Q07_1976-1986 DSL Aquatic Lands Lease.pdf) attached in response to Question 7 and the plat (Q04a_Harborton Plat 2.pdf) attached in response to Question 4. On 1 May 1986, PGE was granted another 10-year aquatic lands lease from DSL for the 3,500-foot long by 150-foot wide stretch of aquatic lands along Parcels A and B; see the document (Q07_1986-1996 DSL Aquatic Lands Lease.pdf) attached in response to Question 7. On 1 May 1996, PGE was granted a 20-year aquatic lands lease from DSL; however, the lease was reduced to a 3,500-foot long by 50-foot wide stretch of aquatic land along Harborton Substation (Parcel A) and Parcel B; see the document (Q07_1996-2015 DSL Aquatic Lands Lease.pdf) attached in response to Question 7.</p> <p>There are no aquatic lands leases associated with the other five PGE-owned parcels (Parcels C through G) or the historically owned parcel (Parcel H).</p>	<p>See Question 4 Attachment Q04a_Harborton Plat 2.pdf</p> <p>Also see Question 7 Attachments Q07_1976-1986 DSL Aquatic Lands Lease.pdf Q07_1986-1996 DSL Aquatic Lands Lease.pdf Q07_1996-2015 DSL Aquatic Lands Lease.pdf</p>
Section 3.0 - Description of Each Property		
13. Provide the following information about each Property identified in response to Question 4:		
a. property boundaries, including a written legal description;	<p>The Harborton parcels (Parcels A through G) and Parcel H are located in the northwest quarter of Section 34 in Township 2 North, Range 1 West and Section 35 in Township 2 North, Range 1 West of the Willamette Meridian, in the COP, County of Multnomah, and State of Oregon.</p> <p>See the attached document (Q13a_Property Summary.pdf). Also see the responses and the documents for Questions 4 and 5, as well as the deeds (Q07_Deed Gatton to PGE 1939.pdf, Q07_Deed Western Timber to PGE 1939.pdf, Q07_Deed Strike to PGE 1944.pdf, Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf, Q07_Deed Peninsula to PGE 1968.pdf, Q07_Deed Meredith to PGE 1975.pdf) attached in response to Question 7.</p>	<p>Question 13 Attachment Q13a_Property Summary.pdf</p> <p>Also see all Question 4 Attachments</p> <p>Also see all Question 5 Attachments</p> <p>Also see Question 7 Attachments Q07_Deed Gatton to PGE 1939.pdf Q07_Deed Western Timber to PGE 1939.pdf Q07_Deed Strike to PGE 1944.pdf Q07_Quit Claim Portland Manuf Co to PGE 1954.pdf Q07_Deed Peninsula to PGE 1968.pdf Q07_Deed Meredith to PGE 1975.pdf</p>
b. location of underground utilities (telephone, electrical, sewer, water main, etc.);	<p>To the best of PGE's knowledge, after reasonable inquiry, the following underground utilities were at the Harborton Substation (Parcel A) and Parcel B:</p> <ul style="list-style-type: none"> When PGE purchased the Harborton Substation (Parcel A) and Parcel B in 1968, PGE assumed the existing easement to the Olympic Pipe Line Company for the 14-inch diameter oil and gas pipeline, which was originally granted by the previous property owner, Peninsula Agencies Inc on 22 July 1964; see the document (Q07_Peninsula 	<p>Question 13 Attachments Q13b_Field View Print - Harborton Sub.pdf (CEII¹) Q13b_Gas Turbine Piping Layout 1973.pdf Q13b_Grounding Plan.pdf (CEII¹) Q13b_Overall Conduit Plan.pdf Q13b_Overall Grounding Plan.pdf Q13b_Pipe Connection on GP Prop Dwg.pdf</p>

¹ Attachment located on the Confidential Critical Energy Infrastructure Information (CEII) CD

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	<p>Easement to Olympic 1964.pdf) attached in response to Question 7. On 6 June 1965, PGE renewed the easement to the Olympic Pipe Line Company for the maintenance and operation of the pipeline; see the document (Q07_PGE Easement to Olympic Pipeline 1965.pdf) attached in response to Question 7. The pipeline runs along the southwestern edge of the Harborton Substation (Parcel A), next to a railroad spur, and through the northwestern portion of Parcel B.</p> <ul style="list-style-type: none"> To the best of PGE's knowledge, after reasonable inquiry, there are three pairs of 6-inch PVC conduits in Parcel A that contain three 750 AL XLP jacketed cables in each conduit for a total of six 6-inch conduits and 18 cables. The conduits are buried approximately 3-feet deep and run from feeder circuit breakers inside the substation to power poles outside the substation. These conduits are used as 13kV feeder getaways to distribute power to the nearby community. The attached Fieldview print (Q13b_Field View Print - Harborton Sub.pdf) shows the approximate location of these three 13kV underground feeder getaways labeled Habrtn-Linnton, Habrtn-Burlintn, and Harborton. Also see the attached electrical grounding documents (Q13b_Grounding Plan.pdf and Q13b_Overall Grounding Plan.pdf). To the best of PGE's knowledge, after reasonable inquiry, there are ten underground vaults on Parcel A, which provide junction points for electrical conduits. Nine of these vaults run along the railroad spur, to the transfer pump, and along the main road. The remaining vault is located in the former Generating Plant area. See the attached document (Q13b_Overall Conduit Plan.pdf). To the best of PGE's knowledge, after reasonable inquiry, there is a natural gas pipeline in Parcel A associated with the former Gas Turbine Plant; see the attached document (Q13b_Gas Turbine Piping Layout 1973.pdf). Fuel pipelines in Parcel A included the following: <ul style="list-style-type: none"> Pipelines connected the rail car unloading pump to the ASTs, running parallel to the rail road spur; Pipelines connected the ASTs to the former Gas Turbine Plant, running east along the access road on the north side of the AST farm and then jogging north into the gas plant; and Pipelines connected the ASTs to the fuel pumping facility at the GP dock south of Parcel A, running from the dock, through the OFTG, through Parcel C, and terminating at the ASTs in Parcel A. <p>See the attached documents (Q13b_Pipe Connection on GP Prop Dwg.pdf, Q13b_Pipeline Plat 2000-10-19.pdf, and Q13b_Yard Piping 1973.pdf).</p> <ul style="list-style-type: none"> To the best of PGE's knowledge, after reasonable inquiry, there are water pipelines in Parcel A, which connect to the water main along NW Marina Way. These water 	<p>Q13b_Pipeline Plat 2000-10-19.pdf Q13b_Yard Piping 1973.pdf</p> <p>See Question 7 Attachments Q07_Peninsula Easement to Olympic 1964.pdf Q07_PGE Easement to Olympic Pipeline 1965.pdf Q07_PGE Easement to Pacific Fiber Link 1998.pdf</p>

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	<p>pipelines service the fire hydrants on the north and east sides of the AST area and a general purpose water spigot near the west equipment storage yard.</p> <ul style="list-style-type: none"> To the best of PGE's knowledge, after reasonable inquiry, a 24-inch concrete stormwater pipe may run beneath the railroad spur and adjacent road to convey stormwater from the swale adjacent to Marina Way to the undeveloped low-lying area within the perimeter dike. This drainage is shown on the figures (Q13i_Grading & Drainage Plan 1972.pdf and Q13k_Harborton Site Dwg 1986.pdf) attached in response to Question 13. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know whether the planned stormwater pipe along the southern edge of the low-lying area was ever constructed. On 28 September 1998, PGE granted an easement to Pacific Fiber Link LLC for a communications conduit in the Harborton Substation (Parcel A) and Parcel B, located along the side of the Olympic Pipe Line Company easement; see the document (Q07_PGE Easement to Pacific Fiber Link 1998.pdf) attached in response to Question 7. <p>To the best of PGE's knowledge after reasonable inquiry, the only underground utility on Parcel C was PGE's historical 14-inch fuel pipeline that passed through the parcel. To the best of PGE's knowledge, after reasonable inquiry, there are no underground utilities on Parcels D through G nor were there any underground utilities on Parcel H during PGE's historical ownership.</p>	
<p>c. location of all underground pipelines whether or not owned, controlled or operated by you;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the underground pipelines on Parcels A, B, and C:</p> <ul style="list-style-type: none"> A 14-inch diameter Olympic Pipe Line Company pipeline, which runs along the southwestern edge of the Harborton Substation (Parcel A), next to a railroad spur, and through the northwestern portion of Parcel B. A Pacific Fiber Link LLC communications conduit, which runs along the southwestern edge of the Harborton Substation (Parcel A), next to a railroad spur, and through the northwestern portion of Parcel B. Fuel pipelines in Parcel A connected the rail car unloading pump to the ASTs, running parallel to the rail road spur; connected the ASTs to the former Gas Turbine Plant, running east along the access road on the north side of the AST farm and then jogging north into the gas plant; and connected the ASTs to the fuel pumping facility at the GP dock south of Parcel A, running from the dock, through the OFTG, through Parcel C, and terminating at the ASTs in Parcel A. <p>For further details, see the response and documents to Question 13b, as well as the documents (Q07_Peninsula Easement to Olympic 1964.pdf, Q07_PGE Easement to Olympic Pipeline 1965.pdf, and Q07_PGE Easement to Pacific Fiber Link 1998.pdf) attached in response to Question 7.</p>	<p>Question 13 Attachments Q13b_Gas Turbine Piping Layout 1973.pdf Q13b_Pipe Connection on GP Prop Dwg.pdf Q13b_Pipeline Plat 2000-10-19.pdf Q13b_Yard Piping 1973.pdf</p> <p>Also see Question 7 Attachments Q07_Peninsula Easement to Olympic 1964.pdf Q07_PGE Easement to Olympic Pipeline 1965.pdf Q07_PGE Easement to Pacific Fiber Link 1998.pdf</p>

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	To the best of PGE's knowledge, after reasonable inquiry, there are/were no underground pipelines on Parcels D through G or on Parcel H during PGE's historical ownership.	
d. surface structures (e.g., buildings, tanks, pipelines, etc.);	<p>In addition to containment dikes, power poles, telephone poles, and streetlights, the following text describes the other surface structures located at the Harborton Substation (Parcel A). Historical structures that are no longer present are marked "historical."</p> <p><u>Former Generating Plant ("Gas Turbine Generating Plant")</u></p> <p>Buildings</p> <ul style="list-style-type: none"> • Maintenance building <p>Structures:</p> <ul style="list-style-type: none"> • Weather tower <p>Equipment:</p> <ul style="list-style-type: none"> • Four dual Turbo Power & Marine Systems "Twin Pacs" (historical) • Temporary storage of assorted electrical equipment (e.g., transformers) • Two small stored battery houses <p><u>Distribution Substation</u></p> <p>Buildings:</p> <ul style="list-style-type: none"> • Control house – houses protective relays, telemetry, communications, and control equipment <p>Structures:</p> <ul style="list-style-type: none"> • Transmission structure – supports high voltage conductors and switches • Distribution structure – supports medium voltage conductors and switches <p>Equipment:</p> <ul style="list-style-type: none"> • Three power circuit breakers • One power transformer • Two station service transformers • Two metering transformers <p><u>AST Area</u></p> <p>Buildings</p> <ul style="list-style-type: none"> • Gas meter station just west of the AST farm (historical) <p>Structures:</p> <ul style="list-style-type: none"> • Two 4.2 million gallon (94,000 barrel) ASTs (connected to the Southern Pacific Pipeline, the PGE pipeline going to the GP dock, and the railroad spur unloading station) • Former Distillate Fuel Transfer Pump Station (terminus of PGE-GP pipeline) <p>Equipment</p> <ul style="list-style-type: none"> • Oil valves on pump pad • Three sump pumps at catch basins • Fire hydrants (three on northwest side, one on the northeast side, and three on the southeast side of the AST farm outside of secondary containment) 	<p>Question 13 Attachments</p> <p>Q13d_Control House Conduit Plan 1973.pdf</p> <p>Q13d_Diking Plan 1971.pdf</p> <p>Q13d_Fence & Facilities Location.pdf</p> <p>Q13d_Fence & Location Plan 1964.pdf</p> <p>Q13d_Gas Turbine Foundation Plan 1973.pdf</p> <p>Q13d_Gas Turbine General Plan.pdf</p> <p>Q13d_General Layout Dwg 1973.pdf</p> <p>Q13d_Generator Plan 1973.pdf</p> <p>Q13d_Location of Structures 1979 with fill est.pdf</p> <p>Q13d_Locations of Structures 1979.pdf</p> <p>Q13d_Maintenance Shop 1972-09.pdf</p> <p>Q13d_Maintenance Shop 1973-03.pdf</p> <p>Q13d_Maintenance Shop 1973-04.pdf</p> <p>Q13d_Portion of Harborton Substation Rev Map.pdf</p> <p>Q13d_Railroad Spur Install Drawing 1972.pdf</p> <p>Q13d_Road and Railroad Plan 1973.pdf</p> <p>Q13d_Roads & Railroads Plan and Details 1972.pdf</p> <p>Q13d_Tank Dike Dwg 1972.pdf</p> <p>Q13d_Turbine Installation Drawing 1973.pdf</p> <p>Q13d_West Area Additional Fence Plan 1976.pdf</p> <p>Q13d_Cable Location Map.pdf</p> <p>Q13d_1999-11-01 Map.pdf</p> <p>Q13d_Harborton Site Photos.pdf</p> <p>Q13d_Tank Side View Photos.pdf</p> <p>Q13d_Harborton Area map.pdf</p> <p>Also see Question 21 Attachments</p> <p>Q21a_2009_Oil Filled Equip in Service-Substation.pdf</p> <p>Q21a_2009_Oil Filled Equip in Service-Switchyard.pdf</p> <p>Q21a_2009_Stored Oil Filled Equipment.pdf</p>

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	<p><u>Rail Car Unloading Area</u></p> <p>Buildings</p> <ul style="list-style-type: none"> • Sample structure at the railroad spur (historical) <p>Equipment</p> <ul style="list-style-type: none"> • Fuel unloading pump (historical) • 26 fuel unloading connections <p><u>115KV Switchyard</u></p> <p>Buildings:</p> <ul style="list-style-type: none"> • Control house – houses protective relays, telemetry, communications, and control equipment <p>Structures:</p> <ul style="list-style-type: none"> • Transmission structure – supports high voltage conductors and switches <p>Equipment:</p> <ul style="list-style-type: none"> • Three power circuit breakers • Six metering transformers • One microwave tower <p><u>Pole Yard</u></p> <p>Structures:</p> <ul style="list-style-type: none"> • Three-sided storage shed <p>Equipment:</p> <ul style="list-style-type: none"> • Bobcat loader for moving poles <p><u>West Equipment Storage Yard</u></p> <p>Equipment:</p> <ul style="list-style-type: none"> • Two stored battery houses • One skid-mounted oil tank • Temporary storage of assorted electrical equipment (e.g., transformers) <p>In addition, there was an aboveground oil tank associated with a historical submerged cable terminal located near the southern boundary of Parcel A. It was removed in 1997/1998 after the tank was vandalized.</p> <p>See the attached documents, as well as the documents (Q21a_2009_Stored Oil Filled Equipment.pdf, Q21a_2009_Oil Filled Equip in Service-Switchyrd.pdf, and Q21a_2009_Oil Filled Equip in Service-Substation.pdf) attached in response to Question 21a. The document (Q21a_2009_Stored Oil Filled Equipment.pdf) attached in response o to Question 21a presents a "snap shot" in time of the types and quantity of electrical equipment stored at the Harborton Substation in May 2009; types and quantity varies on a day by day basis. The documents (Q21a_2009_Oil Filled Equip in Service-Switchyrd.pdf and Q21a_2009_Oil Filled Equip in Service-Substation.pdf) attached in response to Question 21a list the oil-filled equipment currently in use/operated at the Harborton Substation.</p>	

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	To the best of PGE's knowledge, after reasonable inquiry, the only surface structures on Parcels C through H are the transmission line network (e.g., transmission lines, cable terminals, and switching anchors). To the best of PGE's knowledge, after reasonable inquiry, there are no surface structures on Parcel B.	
e. over-water structures (e.g., piers, docks, cranes, etc.);	PGE does not use or maintain any over-water structures at the Harborton Substation. Sublessees of PGE's aquatic lands, adjacent to Parcels A and B, constructed and maintained over-water structures including, but not limited to, a moorage facility, dolphins, and other tie-off points. For further details, see the response to Questions 6c and 7. There are no over-water structures on/adjacent to Parcels C through H.	
f. dry wells;	To the best of PGE's knowledge, after reasonable inquiry, there are/were no dry wells at the Harborton Substation (Parcel A) or Parcels B through H.	
g. treatment or control devices (e.g., surface water, air, groundwater, Resource Conservation and Recovery Act (RCRA), Transfer, Storage, or Disposal (TSD), etc.);	To the best of PGE's knowledge, after reasonable inquiry, the only treatment or control device at the Harborton Substation (Parcel A) is the stormwater control and secondary oil spill containment system. For further details, see the response to Questions 13i, 18, and 19. To the best of PGE's knowledge, after reasonable inquiry, there are/were no treatment or control devices at Parcels B through G or Parcel H during PGE's historical ownership.	
h. groundwater wells, including drilling logs;	Sometime prior to 1989, six piezometers were installed in the open area northwest of the switchyard. On 24 October 2000, piezometers 1, 3, and 4 were located and found to be plugged with soil up to the land surface and no longer usable for groundwater monitoring. Later that month, four monitoring wells were installed (MW-1 through MW-4) to depths of 14 to 22 feet below ground surface (ft bgs). In October 2001, a fifth monitoring well (MW-5) was installed to a depth of 16 ft bgs. These monitoring wells were used in the Preliminary Remedial Investigation (Pre-RI) Assessment. See the attached documents (Q13h_2000-01-00 Figures.pdf, Q13h_2000 Well Logs.pdf, Q13h_2001-09 Silt Contour Map and Boring Logs.pdf, Q13h_2001-11-13 Tie Stakes and MW Map#1.pdf, Q13h_2001-11-13 Tie Stakes and MW Map#2.pdf, Q13h_2001 Well ID.pdf, Q13h_Survey Data and Map 2001-06-28.pdf and Q13h_Tie Stakes and MW Map 2000-12-13.pdf), as well as the documents (Q15_1998-07-06 Phase I Env Site Assessment.pdf, Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf, and Q15_2002-03-28 MW-2 Sampling Results.pdf) attached in response to Question 15.	Question 13 Attachments Q13h_2000 Well Logs.pdf Q13h_2001-09 Silt Contour Map and Boring Logs.pdf Q13h_2001-11-13 Tie Stakes and MW Map#1.pdf Q13h_2001-11-13 Tie Stakes and MW Map#2.pdf Q13h_2001 Well ID.pdf Q13h_Survey Data and Map 2001-06-28.pdf Q13h_Tie Stakes and MW Map 2000-12-13.pdf Q13h_2000-01-00 Figures.pdf Also see Question 15 Attachments Q15_1998-07-06 Phase I Env Site Assessment.pdf Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf
i. stormwater drainage system, and sanitary sewer system, past and present, including septic tank(s) and where, when and how such systems are emptied and maintained;	To the best of PGE's knowledge, after reasonable inquiry, the Harborton parcels (Parcels A through G) and the historically owned Parcel H are/were not served by municipal stormwater, sanitary, or combined sewer lines; see the attached document (Q13i_PortlandMaps StormSanMap.pdf). Site personnel use portable toilets at the Harborton Substation (Parcel A) that are periodically maintained by a subcontractor. The attached document (Q13i_PortlandMaps StormSanMap.pdf) shows at least three culverts that pass under Marina Way and discharge off-site stormwater onto the Harborton Substation (Parcel A). One culvert crosses under Marina Way at the southwest corner and discharges into the wetland in the southern portion of the property. The second discharges near the vehicle access point into the ditch that flows north along the west side of the Harborton Substation toward the undiked wetland north of Harborton Substation facilities. And, the third (shown by Portland Maps as a "natural channel") discharges into the wetland at the northern portion of the	Question 13 Attachments Q13i_PortlandMaps StormSanMap.pdf Q13i_Grading & Drainage Plan 1972.pdf Q13i_West Area Grading Plan 1976.pdf Also see Question 5 Attachment Q05g_Harborton – Photo Log.pdf Also see Question 19 Attachment Q19_2003-12-15 SPCC.pdf

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	<p>property.</p> <p>Stormwater runoff during a rain event was observed during a site visit on 1 April 2009. The photographs (Q05g_Harborton – Photo Log.pdf) attached in response to Question 5 shows the observed ponding and water flow at the Harborton Substation. Photograph numbers in the following discussion refer to this photo log. To the best of PGE's knowledge, after reasonable inquiry, and based on the observations made during the site visit, the following summarizes the stormwater drainage at the Harborton Substation (Parcel A):</p> <ul style="list-style-type: none"> • Precipitation falling west of the railroad spur (or discharged into this area from the culvert beneath Marina Way) infiltrates into the ground in the swale to the west of the railroad spur (Photos 1 and 2). • Precipitation falling between the railroad spur and the fenced portion of the property infiltrates into the ground in the swale between the railroad spur and the pole yard (Photos 3 and 30). • Precipitation falling within the secondary containment structure associated with the rail car unloading pump station (Photo 4) flows into an oil-water separator (labeled "oil separator #2" on the attached design drawing (Q13i_Grading & Drainage Plan 1972.pdf). Since the pump station is no longer used, the outflow from the oil water separator is left in the on position and the stormwater is discharged to the adjacent low-lying area. • Precipitation falling on the switchyard, west equipment storage yard, east equipment storage yard, and pole storage yard either infiltrates into the ground or flows overland toward the north and west to the adjacent swale and low-lying area. Photo 6 shows the relative elevation of the developed areas within the fence and the adjacent low-lying area. Stormwater ponds in many locations on the site (Photos 5, 7, 9-12, 20, and 25) and in three locations (Photos 7, 8, and 11) conduits have been installed to direct the water into the pole storage yard – from where it can more easily drain into the low-lying area. • Precipitation falling on the distribution substation (Photo 19) and southwest of the fuel transfer station (Photo 29) either infiltrates into the ground or flows to the south across the perimeter dike (Photo 22) and into the adjacent wetland (Photos 23 and 24). • Precipitation falling into the fuel pump transfer station or the AST area is contained within the bermed secondary containment areas (see Photos 20, 21, 25, 26, and 27). The water ponds within the bermed areas (Photos 21 and 27) before flowing to the three catch basins (two in the AST area and one in the fuel pump transfer station). Since 1985, fuel is no longer stored in this area and the drainage valves on the catch basins are left in the open position (Photo 28). Stormwater discharges to the wetland 	

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	<p>area south of the Harborton Substation (Photos 24 and 28).</p> <ul style="list-style-type: none"> The low-lying area northwest of the storage yards and northeast of the railroad spur is diked, heavily vegetated, and undeveloped (no site activities are conducted in this area). To the best of PGE's knowledge, after reasonable inquiry, any precipitation falling onto or stormwater draining into this area is absorbed by vegetation, evaporates, or infiltrates through the surface. <p>See the attached design drawings (Q13i_Grading & Drainage Plan 1972.pdf and Q13i_West Area Grading Plan 1976.pdf), and the figure included in Attachment A of the SPCC most recent plan (Q19_2003-12-15 SPCC.pdf) attached in response to Question 19 for more information.</p> <p>Please note, the attached 1972 design plan (Q13i_Grading & Drainage Plan 1972.pdf) shows planned development that was never built. None of the features northwest of the fenced storage yards were constructed. Instead, the area between the fence and the perimeter dike is the undeveloped low-lying area. The drawing notes an existing 24-inch pipe penetrating the perimeter dike just north of the turn-around circle in the road adjacent to the railroad spur, and a plan to connect it to a new stormwater drainage pipe paralleling the road. The drawing also notes an "existing drainage pipe" through the northeast section of the perimeter dike, from the low-lying area toward the Willamette River, and notes "pipe to be plugged with concrete (future)." To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the current condition of either of these pipes, or whether the planned stormwater pipe along the southern edge of the low-lying area was ever constructed.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, stormwater infiltrates through the ground surface at Parcels B through H, and in the portions of Parcel A that are outside the perimeter dike.</p>	
<p>j. subsurface disposal field(s), Underground Injection Control (UIC) wells, and other underground structures (e.g., underground storage tanks (USTs); and where they are located, if they are still used, and how they were closed.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, there are no subsurface disposal fields or UIC wells at the Harborton Substation. The 1972 grading and drainage plan (Q13i_Grading & Drainage Plan 1972.pdf) attached in response to Question 13i shows a perforated pipe (French drain) draining the switchyard stormwater into the adjacent low-lying area to the north. For further details on site stormwater drainage, see the responses to Questions 13i and 18. Other underground structures at the Harborton Substation are described in the response to Question 13b.</p>	<p>Question 13 Attachment Q13i_Grading & Drainage Plan 1972.pdf</p>
<p>k. any and all major additions, demolitions or changes on, under or about the Property, its physical structures or to the Property itself (e.g., stormwater drainage, excavation work); and any planned additions, demolitions or other changes to the Property;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the following presents a timeline of significant activities and changes at the Harborton Substation (Parcel A) during PGE's ownership:</p> <ul style="list-style-type: none"> 1968 – PGE acquires Parcel A, which is almost completely covered by trees and vegetation. It has an unpaved road that crosses the parcel near the center. 1969 – PGE begins site clearing and construction activities. 1971 – PGE completed the construction of a dike system and had the Port of Portland 	<p>Question 13 Attachments Q13k_1977 Operational History.pdf Q13k_1986 Tank Info.pdf Q13k_1986 Turbine Removal.pdf Q13k_1986_SiteFill.pdf Q13k_Construction Drawing 2 1972.pdf Q13k_Construction Drawing 1972.pdf Q13k_Current-Past Use.pdf</p>

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	<p>place fill/dredge material within the dikes, on portions of the parcel.</p> <ul style="list-style-type: none"> • 1972 – PGE installs four dual gas turbine electrical generators (8 turbines total), constructs two 94,000 barrels (4.2 million gallon) ASTs to store diesel fuels, constructs a railroad spur, and completes the substation. The turbines operate on both natural gas and/or fuel. • 1973 – Operations begin at the Harborton Gas Turbine Generating Plant and the Harborton Substation. The Harborton Gas Turbine Generating Plant is only permitted to operate during emergencies and peak demand. The electrical switchyard and radio communications tower are added. The turbines operate intermittently. The facility becomes capable of receiving distillate fuel from vessels/barges when a 14" pipeline is constructed from the GP pier, through the OFTG, to the ASTs at Parcel A. • 1976 – PGE completes west area grading and additional fencing. • 1979 – The turbines cease operating on natural gas. • 1980 – The turbines operate on fuel, but only for 3 hours the entire year. PGE terminates operation of the gas turbines. • 1985 – The gas turbines are sold, disassembled, and removed from the property. Fuel is emptied from the ASTs using the PGE pipeline across the BPA property and loaded into barges under US Coast Guard oversight at the GP dock. • 1986 – PGE permitted ODOT to place fill on the Harborton Substation. • 1988 – East yard area and the former gas turbine plant foundations are converted into the east equipment storage yard for storage of new and non-leaking surplus (used) electrical equipment and components. • 1991-1992 – CP began tank and pipeline modifications for asphalt use. • 1991/1992 – PGE constructed a small graveled circular service road into the area north of the westernmost AST and west of the switchyard for temporary storage of new and used pre-treated wood utility poles (pole storage area). The west equipment storage yard is in use at this point for storage of new and non-leaking surplus (used) electrical equipment and components. • 1992 – PGE terminated CP lease due to lease violations and requested that CP return the tanks/pipelines back to their original (fuel) configurations • Approximately 1993 – ASTs were cleaned and made serviceable as indoor storage areas (e.g., concrete forms, concrete blankets, nuts and bolts). • 1995/1996 – PGE began using the maintenance building and surrounding area for the temporary storage, consolidation, management, and packaging of onsite and off-site PCB-containing electrical equipment, drained electrical equipment oil, and spill response excavated soil and clean up material prior to off-site disposal. Obsolete equipment oil draining activities only occurred within the maintenance building. The building conformed to the regulations for PCB storage facilities under 40 CFR 761 and the capacitors were stored for no longer than 12 months. Adjacent to the maintenance building, water from off-site electrical vaults was treated using a carbon filtration system. Treated water was transported to PSC and discharged to the COP sanitary sewer under COP batch discharge permits. Recovered oil was transported to a local oil-recycling facilities. • 2002 – PGE ceased storage of obsolete equipment (e.g., capacitors, bushings, etc.) 	<p>Q13k_Equipment List 1994.pdf Q13k_Equipment List in Tank Farm 1980.pdf Q13k_Turbine Const 01 General 1972.pdf Q13k_Turbine Const 08 Liquid Fuel Supply 1972.pdf Q13k_Turbine Const 09 Gas Flow Schem 1972.pdf Q13k_Turbine Const 10 Fuel Piping 1972.pdf Q13k_Turbine Const 11 Foundations 1972.pdf Q13k_Turbine Const 12 1972.pdf Q13k_Turbine Const 13 Service Connect 1972.pdf Q13k_Turbine Const Unk 1972.pdf Q13k_1976-05-13 Technical Specification for Substation Site Preparation.pdf Q13k_1971-01-06 dredging fill placement memo.pdf Q13k_1971-01-07 Sediment movement memo.pdf Q13k_Fall 1971_ 1st Diking and Fill Documents.pdf Q13k_1972-12-18 Harborton Site Fill Authorization.pdf Q13k_1986-01-00 Map.pdf Q13k_1986-01-00 Topography Map.pdf Q13k_Flow Diagram Dwg 1973.pdf Q13k_Harborton Site Dwg 1986.pdf All Question 13m Attachments</p> <p>Also see Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see all Question 52 Attachments</p> <p>Also see Question 68 Attachment Q68_2000 PGE Voluntary Agreement with DEQ.pdf</p>

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	<p>prior to disposal and ceased filtering vault water at the Harborton Substation.</p> <ul style="list-style-type: none"> 2003-present – The Harborton Substation is used for substation and switchyard operations, the storage of surplus (used) electrical equipment, the storage of new and used pre-treated wood utility poles, temporary storage of obsolete (used) utility poles prior to disposal, and storage of other miscellaneous PGE operations supplies (e.g., Bobcat, concrete forms, and fencing). <p>See the attached documents, as well as the documents attached in response to Question 13m, the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15, the documents attached in response to Question 52, and the document (Q68_2000 PGE Voluntary Agreement with DEQ.pdf) attached in response to Question 68. PGE intends to continue using Parcel A as a switchyard, substation, pole depot, and to temporarily store electrical equipment until an alternate site is developed. PGE does not have any major additions or demolitions planned.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, there have been no major modifications on PGE-owned Parcels B through G other than the installation of the electrical transmission lines, switching anchors, and cable terminals.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, the only major modifications on Parcel H during PGE's historical ownership (1939 to 1962) included the installation of PGE's electrical transmission lines across the parcel and the installation/removal of a water storage tank and piping valves, a fence and gate, and/or water lines by the COP; see the response to Question 6 for further details.</p>	
l. all maps and drawings of the Property in your possession; and	<p>Please see the attached drawings and figures</p> <p>Also see the figures attached in response to other questions herein.</p>	<p>Question 13 Attachments</p> <p>Q13l_230KV Transmission Sytm 1972.pdf</p> <p>Q13l_230KV Transmission.pdf</p> <p>Q13l_Marine Dredging Plan and Sections.pdf</p> <p>Q13l_River Crossing Ross Keeeler dwg 1954.pdf</p> <p>Q13l_Transmission 1983.pdf</p> <p>Q13l_SiteMap Col-Wil Devel.pdf</p> <p>Q13l_Vicinity Map Col-Wil Devel.pdf</p> <p>Q13l_Excavation Figures.pdf</p>
m. all aerial photographs of the Property in your possession.	<p>See the attached aerial photographs of the Harborton parcels, as well as the aerial photographs attached in response to other questions herein.</p> <p>Aerial photographs are also available through Google Maps, Google Earth, and PortlandMaps. Current aerial photographs from PortlandMaps of the Harborton parcels are attached (Q13m_2001-2008 PortlandMaps Aerials.pdf).</p>	<p>Question 13 Attachments</p> <p>Q13m_1976 Vicinity Layout for ATG Lease.pdf</p> <p>Q13m_1976-04-08 Vicinity Layout Aerial Map.pdf</p> <p>Q13m_2001-2008 PortlandMaps Aerials.pdf</p> <p>Q13m_1966 Aerial.pdf</p> <p>Q13m_1977 Aerial.pdf</p> <p>Q13m_1980 Aerial.pdf</p> <p>Q13m_1984 Aerial.pdf</p> <p>Q13m_1986 Aerial.pdf</p> <p>Q13m_1997 Aerial.pdf</p> <p>Q13m_Aerial with Boundary.pdf</p>

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		Q13m_Aerial with Site Boundary.pdf Q13m_Aerial.pdf Q13m_Aerial-Pre Construction.pdf Q13m_Oblique Aerial.pdf Q13m_Site Description with Aerial for Lease.pdf
n. all information requested in (a) through (m) above regarding, but not limited to, the following:		
i. the Portland General Electric Station L location on 1841 SE Water Ave;	See the separate 104(e) response for Station L.	
ii. the Portland General Electric Station E location on 2635 NW Front Ave;	See the separate 104(e) response for Station E.	
iii. the Portland General Electric Station N location on 6616 N Lombard St.;	See the separate 104(e) response for Station N.	
14. For Properties adjacent to the Willamette River, provide specific information describing the river-ward boundary of private ownership and where state aquatic lands and/or state-management jurisdiction begins. Provide a map that delineates the river-ward boundary of each Property.	<p>Parcels A, B, C, and F are adjacent to the Willamette River. To the best of PGE's knowledge, after reasonable inquiry, the boundary between private and public ownership for these parcels is the Ordinary Low Water line; see the plats (Q04a_Harborton Plat 1.pdf, Q04a_Harborton Plat 2.pdf, and Q04a_Harborton Plat 3.pdf) attached in response to Question 4a.</p> <p>Since 1976, PGE has had a Submerged and Submersible Land Lease (ML-9473) from the State of Oregon, Division of State Lands (DSL) for the aquatic lands along the Willamette River in front of the Harborton Substation (Parcel A) and Parcel B; see the attached plat (Q04a_Harborton Plat 2.pdf). On 1 May 1976, PGE was granted a 10-year aquatic lands lease from the DSL for a 3,500-foot long by 150-foot wide stretch of aquatic lands along Harborton Substation (Parcel A) and Parcel B; see the document (Q07_1976-1986 DSL Aquatic Lands Lease.pdf) attached in response to Question 7. On 1 May 1986, PGE was granted another 10-year aquatic lands lease from DSL for the 3,500-foot long by 150-foot wide stretch of aquatic lands along Parcels A and B; see the document (Q07_1986-1996 DSL Aquatic Lands Lease.pdf) attached in response to Question 7. On 1 May 1996, PGE was granted a 20-year aquatic lands lease from DSL; however, the lease was reduced to a 3,500-foot long by 50-foot wide stretch of aquatic land along Harborton Substation (Parcel A) and Parcel B; see the document (Q07_1996-2015 DSL Aquatic Lands Lease.pdf) attached in response to Question 7. The current aquatic lands lease, which expires on 30 April 2015, protects PGE's riparian frontage rights and disallows any over-water activities without explicit permission from the State of Oregon.</p> <p>Parcels C, D, E, G, and H are not adjacent to the Willamette River.</p>	<p>See Question 4 Attachments Q04a_Harborton Plat 1.pdf Q04a_Harborton Plat 2.pdf Q04a_Harborton Plat 3.pdf</p> <p>See Question 7 Attachments Q07_1976-1986 DSL Aquatic Lands Lease.pdf Q07_1986-1996 DSL Aquatic Lands Lease.pdf Q07_1996-2015 DSL Aquatic Lands Lease.pdf</p>

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<p>15. For each Property, provide all reports, information or data you have related to soil, water (ground and surface), or air quality and geology/hydrogeology at and about each Property. Provide copies of all documents containing such data and information, including both past and current aerial photographs as well as documents containing analysis or interpretation of such data.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE has the following reports, information, or data related to soil, water (ground and surface), or air quality and geology/hydrogeology at the Harborton Substation (Parcel A) and Parcel B:</p> <ul style="list-style-type: none"> Between 1972 and 1979, there were multiple reports and correspondence between PGE and the Oregon Department of Environmental Quality (DEQ), the U.S. Environmental Protection Agency (EPA), the Columbia-Willamette Air Pollution Authority (CWAPA), and the COP (COP) regarding the potential environmental impact and air emissions permit for the Harborton Substation; see the documents (Q50_1972-1976 Emission Correspondences.pdf, Q50_DEQ Staff Report for 1973 Public Hearing.pdf, Q50_PUC Study 1977.pdf, Q50_Special Report_The Harborton Issue 1977.pdf, and Q50_1979 DEQ on Harborton Turbines.pdf) attached in response to Question 50. Between 1972 and 1976, Dames & Moore completed several soil investigations to determine the appropriate locations for structural foundations (e.g. ASTs, turbines, switchyard, etc.) in conjunction with the initial development/construction of the Harborton Substation; see the attached documents (Q15_D&M 1972 Boring Report.pdf, Q15_D&M 1972 Preliminary Foundation Rec.pdf, Q15_D&M 1973 Soil Investigation.pdf, and Q15_D&M 1976 Foundation Investigation.pdf). The attached Environmental Report for PGE Harborton Combustion Gas Turbine Generating Plant and Harborton Transmission Substation Facility report (Q15_1973 PGE Environmental Report.pdf) was submitted to the Portland City Planning Commission by PGE and concluded that there was no feasible alternative location for the generating plant. Also see the attached document (Q15_Addendum to 1973 PGE Environmental Report.pdf). On 3 February 1976, Glen Odell (on behalf of PGE) completed "A Critical Review of the Harborton Station Air Quality Impact"; see the attached document (Q15_Odell 1976 Air Quality Report.pdf). The report reviewed/evaluated the DEQ air quality analysis. In 1986, Geotechnical Resources Inc completed a Phase I Report, Geotechnical Consultation regarding potential filling of the 19-acre western Harborton Substation area; see the attached report (Q15_1986-04-08 GRI Phase I Report.pdf). In 1998, EMCON completed a Phase I Environmental Site Assessment (ESA) of the Harborton Substation on behalf of Metro (a potential buyer); see the attached document (Q15_1998-07-06 Phase I Env Site Assessment.pdf). The Phase I ESA concluded that there did not appear to have been any significant spills or releases at the Harborton Substation; however, further sampling was recommended. See the attached PGE internal 1999 memorandum (Q15_1999-05-12 PGE and Metro Memo.pdf), which discusses the potential sale of the property to Metro and the 	<p>Question 15 Attachments</p> <p><u>Reports</u></p> <p>Q15_D&M 1972 Boring Report.pdf Q15_D&M 1972 Preliminary Foundation Rec.pdf Q15_D&M 1973 Soil Investigation.pdf Q15_1973 PGE Environmental Report.pdf Q15_Addendum to 1973 PGE Environmental Report.pdf Q15_D&M 1976 Foundation Investigation.pdf Q15_Odell 1976 Air Quality Report.pdf Q15_1986-04-08 GRI Phase I Report.pdf Q15_1998-07-06 Phase I Env Site Assessment.pdf Q15_1999-07-26 DEQ Site Assess Recomm.pdf Q15_1999 Response to DEQ Strat.pdf Q15_Addendum to 1999 Response to DEQ Strat.pdf Q15_1999-05-12 PGE and Metro Memo.pdf Q15_2001-02-21 Draft Work Plan Addendum.pdf Q15_2001-08-22 Proposed Soil Excavation.pdf Q15_2001-09-05 Data Package No 2.pdf Q15_2001-09-27 Silt Contour Map.pdf Q15_2002-03-28 MW-2 Sampling Results.pdf Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_Bridgewater-HAI 2000 Pre-RI SAP.pdf Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf Q15_Bridgewater-HAI 2001 Phase I and II.pdf Q15_Bridgewater-HAI 2001 Pre-RI WP Ad1.pdf</p> <p><u>Analytical Data</u></p> <p>Q15_1994-03-23 Soil Data.pdf Q15_1995-10-06 Soil Data.pdf Q15_1995-12-05 Soil Data.pdf Q15_1996-01-23 Soil Data.pdf Q15_1997-02-27 Soil Data.pdf Q15_1997-03-24 Water Data.pdf Q15_1998-08-26 Water Data.pdf Q15_1998-08-27 Water Data.pdf Q15_2000-10-11_DEQ Split Sample.pdf Q15_2002-03-01 Data.pdf Q15_2002-03-01 GW Data.pdf Q15_2002-04-11 Soil Data.pdf Q15_2006-09-12 Soil Data.pdf Q15_2007-08-24 Soil Data.pdf</p> <p><u>Other Document</u></p> <p>Q15_Harborton Sediment Chemicals.pdf</p>

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	<p>proposed/recommended additional sampling by a (former) PGE employee.</p> <ul style="list-style-type: none"> • In July/August 1999 DEQ completed a Site Assessment – Strategy Recommendation report of the Harborton Substation, specifically to evaluate the potential for site activities to have contributed to the contamination in the adjacent Portland Harbor sediments; see the attached document (Q15_1999-07-26 DEQ Site Assess Recomm.pdf). The report concluded that although the site did not warrant adding to the DEQ's Confirmed Release List (CRL) at that time, a remedial investigation was needed. • In November 1999, Bridgewater Group, on behalf of PGE, completed a Response to DEQ's Strategy Recommendation for PGE's Harborton Substation Facility; see the attached documents (Q15_1999 Response to DEQ Strat.pdf and Q15_Addendum to 1999 Response to DEQ Strat.pdf). The document clarified PGE site operations/activities and refuted some of the DEQ's suspected links of Harborton Substation activities and sediment contamination in the adjacent portion of the Portland Harbor. • On 30 November 1999, PGE entered into the DEQ's Voluntary Cleanup Program for the Harborton Substation (Parcel A) and Parcel B. In June 2000, PGE entered into a Voluntary Agreement for Remedial Investigation and Source control Measures with DEQ, which included the option for PGE to perform a Pre-RI assessment, or focused investigation of site uplands. On behalf of PGE, Bridgewater Group and HAI conducted a Pre-RI of the Harborton Substation between 2000 and 2002. This assessment generated the following reports: <ul style="list-style-type: none"> ○ "Pre-RI Sampling and Analysis Plan" on 29 September 2000; see the attached document (Q15_Bridgewater-HAI 2000 Pre-RI SAP.pdf), ○ "Pre-RI Work Plan "on 5 October 2000; see the attached document (Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf). ○ "Phase I and II Pre-RI Results "on 29 January 2001; see the attached document (Q15_Bridgewater-HAI 2001 Phase I and II.pdf). ○ "Pre-RI Work Plan Addendum No. 1" on 30 March 2001; see the attached document (Q15_Bridgewater-HAI 2001 Pre-RI WP Ad1.pdf). ○ "Data Package (No. 2), PGE Harborton Substation Facility" on 5 September 2001; see the attached document (Q15_2001-09-05 Data Package No 2.pdf). ○ "Pre-RI Report" on 11 February 2002; see the attached document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf). <p>The Pre-RI assessed the nature and extent of soil and groundwater contamination associated with site activities/operations and past spills/releases at the Harborton Substation. The Pre-RI identified several areas within the Harborton Substation with petroleum hydrocarbon-impacted soil. PGE addressed these areas by completing</p>	<p>Also see Question 19 Attachments Q19_1985-10-09 SPCC.pdf Q19_1986-10-17 SPCC.pdf Q19_1996-03-05 SPCC.pdf Q19_2003-02-14 SPCC.pdf Q19_2003-12-15 SPCC.pdf Q19_1997-07-28 SPCC.pdf Q19_1999-02-23 SPCC.pdf</p> <p>Also see Question 50 Attachments Q50_1972-1976 Emission Correspondences.pdf Q50_DEQ Staff Report for 1973 Public Hearing.pdf Q50_PUC Study 1977.pdf Q50_Special Report_The Harborton Issue 1977.pdf Q50_1979 DEQ on Harborton Turbines.pdf Q50_2005-12-06 DEQ to Norton.pdf Q50_2004-05-18 EPA Agrees to Upland Source Control.pdf</p> <p>Also see all Question 62 Attachments</p>

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	<p>focused soil removal actions (excavation and off-site disposal). A total of 11.08 tons of soil were excavated from five small areas in 2001. These areas targeted soils with total petroleum hydrocarbon concentrations greater than 1,000 ppm and were located near the rail car unloading area, in the switchyard, adjacent to the fuel transfer station, next to AST #2, and at the cable crossing location near the southern boundary of Parcel A. These areas are depicted on Figure 23 of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf).</p> <p>The Pre-RI Report concluded that there is no likely present or past source or pathway for release of hazardous substances to Willamette River surface water or sediments at or from the Harborton Substation, and that the Harborton Substation does not present a "high priority threat to present and future public health, safety, welfare, or the environment."</p> <p>The Oregon DEQ and USEPA reviewed the results of the Pre-RI Report and associated documents/information and agreed that the site is not a current source of contamination to the Willamette River; see the documents (Q50_2005-12-06 DEQ to Norton.pdf and Q50_2004-05-18 EPA Agrees to Upland Source Control.pdf) attached in response to Question 50.</p> <p>Also see the attached associated documents (Q15_2001-02-21 Draft Work Plan Addendum.pdf, Q15_2001-08-22 Proposed Soil Excavation.pdf, Q15_2001-09-27 Silt Contour Map.pdf, and Q15_2002-03-28 MW-2 Sampling Results.pdf). For further details on spills/releases at the Harborton Substation, see the response and documents for Question 62. For information regarding the disposal of wastes and materials, see the response to Question 21.</p> <p>In addition soil and water analytical data not already included in the reports are attached. Also attached is a document with a table comparing the Portland Harbor sediment concentrations (unknown date) adjacent to Harborton Substation to a 1973 USGS study; see the attached document (Q15_Harborton Sediment Chemicals.pdf).</p> <p>The SPCC Plans (Q19_1985-10-09 SPCC.pdf, Q19_1986-10-17 SPCC.pdf, Q19_1996-03-05 SPCC.pdf, Q19_1997-07-28 SPCC.pdf, Q19_1999-02-23 SPCC.pdf, Q19_2003-02-14 SPCC.pdf, and Q19_2003-12-15 SPCC.pdf), attached in response to Question 19, briefly discuss topography and soil condition at the Harborton Substation (Parcel A).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, PGE does not have any reports, information, or data for Parcels C through H related to soil, water (ground and surface), or air quality and geology/hydrogeology.</p>	

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<p>16. Identify all past and present solid waste management units or areas where materials are or were in the past managed, treated, or disposed (e.g., waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on each Property. For each such unit or area, provide the following information:</p>	<p>The Harborton Substation (Parcel A) has not had any waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits. But, materials and new, surplus (used), and obsolete equipment have been managed, stored, and/or treated at the site, see response to Questions 16a through 16g below.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, there are/were no past or present solid waste management units or areas where materials are or were in the past managed, treated, or disposed at Parcels B through G or during PGE's historical ownership of Parcel H.</p>	
<p>a. a map showing the unit/area's boundaries and the location of all known units/areas whether currently in operation or not. This map should be drawn to scale, if possible, and clearly indicate the location and size of all past and present units/areas;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the current and historical material and waste storage/treatment areas at the Harborton Substation (Parcel A) were:</p> <p><u>ASTs</u></p> <ul style="list-style-type: none"> • 1973 to 1985 – The ASTs were used for storage of fuel (diesel #2), and • 1993 to present – The ASTs were cleaned, cut open, and PGE began using them as indoor storage areas (e.g., storage of concrete forms, concrete blankets, nuts and bolts). <p><u>Maintenance Building</u></p> <ul style="list-style-type: none"> • Approximately 1972 to 1985 – The maintenance building was used for the storage of materials and equipment (e.g. crane and tools) used for turbine maintenance, • 1985 to 1995/1996 – The maintenance building was used to store a used parade float, • 1995/1996 to 2002 – The maintenance building and surrounding area were used for the temporary storage, consolidation, management, and packaging of onsite and off-site PCB-containing electrical equipment, drained electrical equipment oil, and spill response excavated soil and clean up material prior to off-site disposal. Obsolete equipment oil draining activities only occurred within the maintenance building. • 1995/1996 to 2002 – Adjacent to the maintenance building, water from off-site electrical vaults was filtered using a carbon filtration system prior to off-site disposal/recycling, and • 2002 to present – The maintenance building contains miscellaneous supplies (desk, tools, etc). <p><u>Storage Yards</u></p> <ul style="list-style-type: none"> • 1988 to 2002 – The east equipment storage yard (former Generating Plant) was used 	<p>See Question 15 Attachments Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_1998-07-06 Phase I Env Site Assessment.pdf Q15_Bridgewater-HAI 2001 Phase I and II.pdf</p>

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	<p>for the storage of new and non-leaking surplus (used) electrical equipment and components (< 500 ppm PCBs),</p> <ul style="list-style-type: none"> • 1992 to 2002 – The west equipment storage yard was used for the storage of new and non-leaking surplus (used) electrical equipment and components (< 500 ppm PCBs), • 1995/1996 to present – The east equipment storage yard (former Generating Plant) is used to store a used parade float, • 2002 to present – The west equipment storage yard and east equipment storage yard (former Generating Plant) are used for the storage of non-leaking surplus (used) electrical equipment and components (< 500 ppm PCBs), and • 1991/1992 to present – The pole yard is used for the temporary storage of new and used pre-treated wood utility poles and of obsolete (used) utility poles prior to disposal. <p><u>Rail Car Unloading Area</u></p> <ul style="list-style-type: none"> • From approximately 1973 to 1980, the rail car unloading area was used to unload diesel fuel from rail cars along the rail spur. <p><u>Fuel Transfer Station</u></p> <ul style="list-style-type: none"> • From approximately 1973 to 1985, the fuel transfer station was used to pump fuel from the pipeline to the ASTs and from the ASTs to the turbines. <p>See the figures in the documents (Q15_1998-07-06 Phase I Env Site Assessment.pdf, Q15_Bridgewater-HAI 2001 Phase I and II.pdf, and Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15, as well as the response to Questions 5g and 13k.</p>	
<p>b. dated aerial photograph of the site showing each unit/area;</p>	<p>See Figure 1 in the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Also see the aerial photographs attached in response to Question 13m.</p>	<p>See Question 13 Attachments All Question 13m Attachments</p> <p>Also see Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p>
<p>c. the type of unit/area (e.g., storage area, landfill, waste pile, etc.), and the dimensions of the unit/area;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the dimensions of the storage unit/areas at the Harborton Substation (Parcel A) were/are:</p> <ul style="list-style-type: none"> • Each of the two ASTs has a diameter of 134 feet, a height of 40 feet, and a storage capacity of 4.2 million gallons (100,000 barrels). The bermed area around the two ASTs is approximately 600 feet x 180 feet. • The maintenance building dimensions are 35 feet by 40 feet. 	

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	<ul style="list-style-type: none"> • The dimensions of the east equipment storage yard are approximately 560 feet by 440 feet. The dimensions of the west equipment storage yard are approximately 330 feet by 180 feet. • The dimensions of the pole yard are approximately 470 feet by 345 feet. • The dimensions of the rail car unloading area are approximately 1,000 feet by 40 feet. • The dimensions of fuel transfer station and the bermed area are approximately 100 feet by 50 feet. 	
d. the dates that the unit/area was in use;	See the response to Question 16a.	
e. the purpose and past usage (e.g., storage, spill containment, etc.);	See the response to Question 16a.	
f. the quantity and types of materials (hazardous substances and any other chemicals) located in each unit/area and;	<p>To the best of PGE's knowledge, the following summarizes the quantity and types of materials located in the storage unit/areas at the Harborton Substation (Parcel A):</p> <ul style="list-style-type: none"> • Each of the ASTs had a maximum volume of 4.2 million gallons (100,000 barrels) of fuel. Only about 1/3 of one tank of fuel was consumed by the gas turbines during the time they were operated on the property. The fuel in the tanks was removed in 1985. Only a small quantity of miscellaneous supplies (e.g., concrete forms, concrete buckets, and nuts and bolts) has been stored in the tanks since approximately 1993. • Various quantities of maintenance materials and supplies (e.g., crane and tools) were stored in the maintenance building during the gas turbine operations (1973-1985). A single parade float was stored in the building from approximately 1985 to 1995/1996. Various quantities of onsite and off-site PCB-containing electrical equipment, drained electrical equipment oil, and spill response excavated soil and clean up material were temporarily stored, consolidated, managed, and packaged in the maintenance building from 1995/1996 to 2002 prior to off-site disposal. Since 2002, the maintenance building has stored a few miscellaneous supplies (e.g., desk, tools, etc). • The quantity of electrical equipment stored in the east and west storage yards varies on a day-to-day basis. The parade float formerly stored in the maintenance building is currently stored in the east equipment storage yard. • Currently, there are approximately 30 new pre-treated utility poles in the pole storage area. However, the number of utility poles stored in the pole storage area varies at any given time because poles are used during emergencies and new ones are ordered as needed. • The rail unloading area had a capacity of up to 26 rail cars. 	

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	<ul style="list-style-type: none"> Various quantities of fuel were pumped through the fuel transfer station. 	
<p>g. the construction (materials, composition), volume, size, dates of cleaning, and condition of each unit/area.</p>	<p>To the best of PGE's knowledge, the following summarizes the construction, volume, size, and dates of cleaning (if any), and condition of the storage unit/areas at the Harborton Substation (Parcel A):</p> <ul style="list-style-type: none"> The ASTs were constructed in 1972 and were fixed-roof, floating-pan, welded steel tanks mounted on concrete foundations within a bermed area. Each of the tanks had a 4.2 million gallon (100,000 barrel) capacity. The ASTs were drained and cleaned in 1985 and the product was sold and transferred off the site. In approximately 1993 the tanks were cleaned and a hole was cut in each tank's wall. The maintenance building was constructed in 1972 and is a single-level, steel building with a high bay and a bermed area within. It is 35 feet by 40 feet and is in good condition. The equipment storage areas are gravel covered yards. The east equipment storage area has concrete foundations from the former gas turbine footings. The pole storage yard is a dirt and gravel-covered yard. The rail car unloading area is gravel-covered with railroad tracks and unloading connectors. The access road is obstructed by a cement barricade. This area is no longer used and is not maintained (operations ceased in 1980/1985). The fuel transfer station was constructed in 1972 and is a single-level, steel structure within a bermed area. The fuel transfer station and bermed area is approximately 100 feet by 50 feet. 	
<p>17. If the unit/area described above is no longer in use, how was such unit/area closed and what actions were taken to prevent or address potential or actual releases of waste constituents from the unit/area.</p>	<p>The storage units/areas have been used for various storage purposes over the years of operations; see the response to Question 16. The rail car unloading area and fuel transfer station are no longer used. To the best of PGE's knowledge, after reasonable inquiry, the only action taken to close these areas was to place a cement barricade across the access road to the rail car unloading area.</p> <p>As discussed in response to Question 15, a Pre-RI was conducted at the Harborton Substation and PGE elected to remove 11.08 tons of petroleum hydrocarbon-contaminated soil (with > 1,000 ppm petroleum hydrocarbons) from small areas near the rail car unloading area, in the switchyard, adjacent to the fuel transfer station, next to AST #2; see the response and document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) for Question 15.</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p>

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<p>18. For each Property, provide the following information regarding any current or former sewer or storm sewer lines or combined sanitary/storm sewer lines, drains, ditches, or tributaries discharging into the Willamette River:</p> <p>a. the location and nature of each sewer line, drain, ditch, or tributary;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the Harborton parcels (Parcels A through G) and the historically owned Parcel H are/were not served by municipal stormwater, sanitary, or combined sewer lines; see the document (Q13i_PortlandMaps StormSanMap.pdf) attached in response to Question 13i. The maintenance building and switchyard control house were originally designed to include bathroom drains (with vault or septic field); however, the bathrooms were never installed. Instead, site personnel use portable toilets at the Harborton Substation (Parcel A) that are periodically maintained by a subcontractor.</p> <p>The document (Q13i_PortlandMaps StormSanMap.pdf) attached in response to Question 13i shows at least three culverts that pass under Marina Way and discharge off-site stormwater onto the Harborton Substation (Parcel A). One culvert crosses under Marina Way at the southwest corner and discharges into the wetland in the southern portion of the property. The second discharges near the vehicle access point into the ditch that flows north along the west side of the Harborton Substation toward the undiked wetland north of Harborton Substation facilities. And, the third (shown by Portland Maps as a "natural channel") discharges into the wetland at the northern portion of the property.</p> <p>Stormwater runoff during a rain event was observed during a site visit on April 1, 2009. The photographs (Q05g_Harborton – Photo Log.pdf) attached in response to Question 5 show the observed ponding and water flow at the Harborton Substation. Photograph numbers in the following discussion refer to this photo log. To the best of PGE's knowledge, after reasonable inquiry, and based on the observations made during the site visit, the following summarizes the stormwater drainage at the Harborton Substation (Parcel A):</p> <ul style="list-style-type: none"> • Precipitation falling west of the railroad spur (or discharged into this area from the culvert beneath Marina Way) infiltrates into the ground in the swale to the west of the railroad spur (Photos 1 and 2). • Precipitation falling between the railroad spur and the fenced portion of the property infiltrates into the ground in the swale between the railroad spur and the pole yard (Photos 3 and 30). • Precipitation falling within the secondary containment structure associated with the rail car unloading pump station (Photo 4) flows into an oil-water separator (labeled "oil separator #2" on the design drawing (Q13i_Grading & Drainage Plan 1972.pdf) attached in response to Question 13i. Since the pump station is no longer used, the outflow from the oil water separator is left in the on position and the stormwater is 	<p>Question 18 Attachment Q18_Harborton Drains.pdf</p> <p>Also see Question 5 Attachment Q05g_Harborton – Photo Log.pdf</p> <p>Also see Question 13 Attachments Q13i_PortlandMaps StormSanMap.pdf Q13i_Grading & Drainage Plan 1972.pdf Q13i_West Area Grading Plan 1976.pdf</p> <p>Also see Question 19 Attachment Q19_2003-12-15 SPCC.pdf</p>

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	<p>discharged to the adjacent low-lying area.</p> <ul style="list-style-type: none"> • Precipitation falling on the switchyard, west equipment storage yard, east equipment storage yard, and pole storage yard either infiltrates into the ground or flows overland toward the north and west to the adjacent swale and low-lying area. Photo 6 shows the relative elevation of the developed areas within the fence and the adjacent low-lying area. Stormwater ponds in many locations on the site (Photos 5, 7, 9-12, 20, and 25) and in three locations (Photos 7, 8, and 11) conduits have been installed to direct the water into the pole storage yard – from where it can more easily drain into the low-lying area. • Precipitation falling on the distribution substation (Photo 19) and southwest of the fuel transfer station (Photo 29) either infiltrates into the ground or flows to the south across the perimeter dike (Photo 22) and into the adjacent wetland (Photos 23 and 24). • Precipitation falling into the fuel pump transfer station or the AST area is contained within the bermed secondary containment areas (see Photos 20, 21, 25, 26, and 27). The water ponds within the bermed areas (Photos 21 and 27) before flowing to the three catch basins (two in the AST area and one in the fuel pump transfer station). Since 1985, fuel is no longer stored in this area and the drainage valves on the catch basins are left in the open position (Photo 28). Stormwater discharges to the wetland area south of the Harborton Substation (Photos 24 and 28). • The low-lying area northwest of the storage yards and northeast of the railroad spur is diked, heavily vegetated, and undeveloped (no site activities are conducted in this area). To the best of PGE's knowledge, after reasonable inquiry, any precipitation falling onto or stormwater draining into this area is absorbed by vegetation, evaporates, or infiltrates through the surface. <p>See the design drawings (Q13i_Grading & Drainage Plan 1972.pdf and Q13i_West Area Grading Plan 1976.pdf) attached in response to Question 13i, and the figure included in Attachment A of the SPCC most recent plan (Q19_2003-12-15 SPCC.pdf) attached in response to Question 19 for more information.</p> <p>Please note, the 1972 design plan (Q13i_Grading & Drainage Plan 1972.pdf) attached in response to Question 13 shows planned development that was never built. None of the features northwest of the fenced storage yards were constructed. Instead, the area between the fence and the perimeter dike is the undeveloped low-lying area. The drawing notes an existing 24-inch pipe penetrating the perimeter dike just north of the turn-around circle in the road adjacent to the railroad spur, and a plan to connect it to a new stormwater drainage pipe paralleling the road. The drawing also notes an "existing drainage pipe" through the northeast section of the perimeter dike, from the low-lying area toward the Willamette River, and notes "pipe to be plugged with concrete (future)." To the best of PGE's knowledge, after reasonable</p>	

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	<p>inquiry, PGE does not know the current condition of either of these pipes, or whether the planned stormwater pipe along the southern edge of the low-lying area was ever constructed.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, stormwater infiltrates through the ground surface at Parcels B through H, and in the portions of Parcel A that are outside the perimeter dike.</p> <p>Floor drains were installed in the switchyard control house and the maintenance building (labeled "shop" in the figure) near the former Generating Plant during the initial construction of the Harborton Substation; see the attached document (Q18_Harborton Drains.pdf). To the best of PGE's knowledge, after reasonable inquiry, PGE does not know where these drains would have discharged. The drains in the maintenance building were cemented over in 1995 during the building modifications to allow for PCB handling.</p>	
b. the date of construction of each sewer line, drain, ditch, or tributary;	To the best of PGE's knowledge, after reasonable inquiry, the ditches and drains within the Harborton Substation were likely constructed during the initial construction/development of the facility around 1972.	
c. whether each sewer line, or drain was ever connected to a main trunk line;	To the best of PGE's knowledge, after reasonable inquiry, the ditches and drains are/were not connected to a main trunk line.	
d. whether each sewer line, drain, ditch, or tributary drained any hazardous substance, waste, material or other process residue to the Willamette River; and	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE is unaware of the discharge of waste, material, or process residue to any sewers, drains, or ditches at the Harborton Substation (Parcel A) and subsequently to the Willamette River.</p> <p>Vault water from carbon filtration activities (1995/1996 to 2002) was transported to PSC and discharged under permit to the municipal sanitary sewer. For further details, see the responses to Questions 16 and 21.</p>	
e. any documentation regarding but not limited to the following on any and all outfalls to the Willamette River which are located within the boundaries of the Property(ies). Your response should include, but not be limited to:	<p>Although most precipitation falling within the Harborton Substation infiltrates the ground surface directly, some surface water runoff may flow into ditches (swales) before discharging into the Multnomah Channel and/or the Willamette River. To the best of PGE's knowledge, after reasonable inquiry, the City of Portland's stormwater line also discharges to the western ditch and then on into the Multnomah Channel and/or Willamette River; therefore, the water discharging into the Multnomah Channel is of mixed origin. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the area serviced by the City of Portland's stormwater line that also discharges to the western ditch.</p>	
i. the areas serviced by the outfalls; and		
ii. the type of outfall (i.e., storm water or single facility operational).		
19. Provide copies of any stormwater or property drainage studies, including data from sampling, conducted at these Properties on stormwater, sheet flow, or	The current (Q19_2003-02-14 SPCC.pdf and Q19_2003-12-15 SPCC.pdf) and past Harborton Substation (Parcel A) SPCC Plans, as well as figures showing site-specific containment features, are attached (Q19_1985-10-09 SPCC.pdf, Q19_1986-10-17 SPCC.pdf, Q19_1996-03-05 SPCC.pdf, Q19_1997-07-28 SPCC.pdf, and Q19_1999-02-23 SPCC.pdf).	<p>Question 19 Attachments</p> <p>Q19_1985-10-09 SPCC.pdf</p> <p>Q19_1986-10-17 SPCC.pdf</p> <p>Q19_1996-03-05 SPCC.pdf</p> <p>Q19_1997-07-28 SPCC.pdf</p>

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<p>surface water runoff. Also provide copies of any Stormwater Pollution Prevention, Maintenance Plans or Spill Plans developed for different operations during the Respondent's operation of each Property.</p>	<p>The SPCC Plans and associated figures are utilized by PGE to ensure that the Harborton Substation (Parcel A) has adequate operating procedures that prevent oil spills, control measures installed to prevent a spill from reaching navigable waters, and countermeasures to contain, cleanup, and mitigate the effects of an oil spill that reaches navigable waters. The spill containment system at the Harborton Substation captures and contains oil from power equipment in case of leaks or failures.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, the majority of precipitation falling on the Harborton Substation infiltrates the gravel surface of the property. For further details on the Harborton Substation stormwater drainage, see the responses to Questions 13i and 18.</p> <p>General PGE spill clean up procedures are described in the attached documents (Q19_Oil Spill Cleanup Procedures.pdf, Q19_Oil Spill First Response.pdf, Q19_Oil Spill Response Team.pdf and Q19_Environmental Services Oil Spill Instruction.pdf).</p> <p>In addition to the drainage evaluations in the SPCC Plans, surface water drainage was also evaluated in the 2002 Pre-RI Investigation; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. There are also some brief topography and drainage discussions and/or illustrations in the documents (Q15_1998-07-06 Phase I Env Site Assessment.pdf and Q15_2001-09-27 Silt Contour Map.pdf) attached in response to Question 15.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, there are no SPCC Plans or drainage studies for Parcels B through G.</p>	<p>Q19_1999-02-23 SPCC.pdf Q19_2003-02-14 SPCC.pdf Q19_2003-12-15 SPCC.pdf</p> <p>Q19_Oil Spill Cleanup Procedures.pdf Q19_Oil Spill First Response.pdf Q19_Oil Spill Response Team.pdf Q19_Environmental Services Oil Spill Instruction.pdf</p> <p>Also see Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_1998-07-06 Phase I Env Site Assessment.pdf Q15_2001-09-27 Silt Contour Map.pdf</p>
<p>Section 4.0 - Respondent's Operational Activities</p>		
<p>20. Describe the nature of your operation or business activities at each Property. If the operation or business activity changed over time, please identify each separate operation or activity, the dates when each operation or activity was started and, if applicable, ceased.</p>	<p>See the responses to Questions 5g, 13k, and 16 for a description of the operations/activities performed at the Harborton Substation (Parcel A) and how they changed over time. Also see the history of operations/activities at the Harborton Substation presented in the Bridgewater Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15.</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p>
<p>21. At each Property, did you ever use, purchase, generate, store, treat, dispose, or otherwise handle any waste, or material? If the answer to the preceding question is anything but an unqualified "no," identify:</p>	<p>Waste and materials have been handled at the Harborton Substation (Parcel A) in conjunction with various activities and operations, construction projects, and spills. Other than the installation of the transmission lines, switching anchors, and cable terminals, to the best of PGE's knowledge, after reasonable inquiry, no wastes or materials are/were stored, generated, treated, disposed, or otherwise handled at Parcels B through G or from the historically owned Parcel H.</p>	

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<p>a. in general terms, the nature and quantity of the waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;</p>	<p>Waste and materials have been handled at the Harborton Substation (Parcel A) in conjunction with various activities and operations, construction projects, and spills. To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the nature and quantity of waste and materials handled at the Harborton Substation currently (2003 to present), recently (1995/1996 to 2002), and historically (pre-1995).</p> <p><u>Materials and Supplies</u> The primary materials currently used for substation and switchyard maintenance include transformer oil (liquid), solvents (liquid), denatured alcohol (liquid), degreasers (liquid), lubricating grease (semi-liquid), hydraulic fluid (liquid) and paint (liquid). To the best of PGE's knowledge, after reasonable inquiry, these materials are not currently stored onsite. The products/materials currently used at PGE properties within Oregon and potentially used at the Harborton Substation are listed in the document (Q33_EMC List.pdf) attached in response to Question 33. The chemical composition, characteristics, and physical state of the materials listed in the document are described in the MSDS documents provided in a supplemental submittal (Supplemental Submittal S2).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, products and materials used in the past are similar to those used currently, with the addition of other historically used materials for the operation of the turbines including, but not limited to, natural gas and distillate fuel (diesel #2, liquid). The natural gas was piped in. Distillate fuel may have been delivered via one of three routes: 1) delivered to the ASTs via pipelines connected directly to the SSLP/GATX oil pipelines west of the site, 2) piped in from barges at the GP docking facility and through the OFTG and Parcel C, or 3) brought in by rail at the rail car unloading area. Fuel was stored in the two ASTs, each of which had a maximum volume of 4.2 million gallons (100,000 barrels) of fuel. Only about 1/3 of one tank of fuel was consumed by the gas turbines during the time they were operated on the property (1973-1980). The fuel in the tanks was removed in 1985. Since approximately 1993, a small quantity of miscellaneous supplies (e.g., concrete forms, concrete buckets, and nuts and bolts; solid) has been stored in the cleaned-out and cut open tanks.</p> <p>Various quantities of maintenance materials and supplies (e.g., crane and tools; solid) were stored in the maintenance building during the gas turbine operations (1973-1985). A single parade float (solid) was stored in the maintenance building from approximately 1985 to 1995/1996, after which time it was transferred to its current location in the east equipment storage yard. Since 2002, the maintenance building has stored a few miscellaneous supplies (e.g., desk, tools, etc; solid). According to an employee interview documented in the Phase I ESA (Q15_1998-07-06 Phase I Env Site Assessment.pdf) attached in response to Question 15, a cargo container was located onsite (at least prior to 1998) for the purpose of paint (liquid) storage.</p> <p>Since 1991/1992, the pole storage yard has been used for the temporary storage of new and used pre-treated wood utility poles (solid). Currently, there are approximately 30 new utility poles in the pole storage area. However, the number of utility poles stored in the pole storage</p>	<p><u>Question 21 Attachments</u> <u>Equipment/Material Transactions</u> Q21a_1986 Bill of Sale and other docs.pdf Q21a_Lease Termination 1985.pdf Q21a_McCall to PGE Equip Purchase 1993.pdf Q21a_Turbine Agreement PGE & McCullagh 1986.pdf Q21a_Turbine Agreement PGE & Tipperary 1986.pdf Q21a_Turbine Lease Termin 2nd Amdmt 1985.pdf Q21a_Turbine Lease Termination 1984-03-01.pdf Q21a_Turbine Sale Amdmt 2.pdf Q21a_Turbine Sale_Agreement 1983-02-09.pdf Q21a_Turbine Sale_Amdmt 3.pdf Q21a_Turbine Sale_Purchase Agreement.pdf Q21a_1982-06-04 Lab Results & Supervisor log.pdf Q21a_Document List_McCollagh Lease.pdf Q21a_1977 Certificate of Merger.pdf Q21a_1981 DRAFT Oil Sale or Storage Agreement.pdf Q21a_Use of Tanks memo 1991.pdf</p> <p><u>Oil-Filled Equipment</u> Q21a_2009_Oil Filled Equip in Service-Switchyrd.pdf Q21a_2009_Oil Filled Equip in Service-Substation.pdf Q21a_2009_Stored Oil Filled Equipment.pdf Q21a_2007-09-00 Substation Equipment List.pdf Q21a_1985_Inventory Sheet for Harborton.pdf Q21a_1985-01-17_Oil Filled Equipment.pdf Q21a_1986-11-07_Oil Filled Equipment.pdf</p> <p><u>Wastes</u> Q21a_Waste Stream Summary.pdf Q21a_1996-2002 Batch Dis. Request.pdf Q21a_1987-2002 Bills of Lading.pdf Q21a_1994 PGE-CWM Letter.pdf Q21a_1995-2-04 Oil Data.pdf Q21a_1996-05-01 Oil & Water Data.pdf Q21a_1996-05-02 Oil Data.pdf Q21a_PGE Transport Docs.pdf Q21a_1998-04-14 Oil Data.pdf Q21a_2001 IDW Inventory Form.pdf Q21a_2002-04-18 Oil Data.pdf Q21a_2002 Capacitor Disp Order Form.pdf Q21a_Certs of Disposal.pdf Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf Q21a_Items for Disposal 2002-01-09.pdf</p>

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	<p>area varies at any given time because poles are used during emergencies and new ones are ordered as needed.</p> <p><u>Equipment/Material Transactions</u></p> <p>After power generation operations ceased at the Harborton Substation, PGE sold the turbines (solid) and stored fuel (liquid). To the best of PGE's knowledge, after reasonable inquiry, the following summarizes these transactions, as well as other requested/considered transactions:</p> <ul style="list-style-type: none"> • PGE drafted an agreement for the sale of excess fuel (liquid) to Western Oil Marketing on 4 February 1981; see the attached document (Q07_1981 DRAFT Oil Sale or Storage Agreement.pdf). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Use of Tanks memo 1991.pdf), it is unlikely that this agreement was ever executed. • PGE procured a loan from the Bank of California on 5 July 1973 in order to finance the four jet turbines (solid) at the Harborton Substation. Between 1983 and 1986, the Bank of California entered into two separate Bills of Sale, releasing the titles, rights and interests of the four jet turbines to PGE. At this time, the other loan participants (McCullough Leasing Inc and Tipperary Corporation) surrendered their Equipment Trust Notes to PGE. PGE then sold the turbines to Petroleum Recovery Systems of Texas Inc. The turbines were removed from the Harborton Substation in 1985. See the attached documents (Q21a_1986 Bill of Sale and other docs.pdf, Q21a_Document List_McCollagh Lease.pdf, Q21a_1977 Certificate of Merger.pdf, Q21a_Lease Termination 1985.pdf, Q21a_Turbine Agreement PGE & McCullagh 1986.pdf, Q21a_Turbine Agreement PGE & Tipperary 1986.pdf, Q21a_Turbine Lease Termin 2nd Amdmt 1985.pdf, Q21a_Turbine Lease Termination 1984-03-01.pdf, Q21a_Turbine Sale Amdmt 2.pdf, Q21a_Turbine Sale_Agreement 1983-02-09.pdf, Q21a_Turbine Sale_Amdmt 3.pdf, and Q21a_Turbine Sale_Purchase Agreement.pdf). • In 1985, the remaining fuel (liquid) in the ASTs was sold and removed from the Harborton Substation. To the best of PGE's knowledge, after reasonable inquiry, PGE no longer knows to whom the fuel was sold. The attached document (Q21a_1982-06-04 Lab Results & Supervisor log.pdf) presents the results of testing conducted on the oil in 1982. • On 18 November 1993, McCall Oil and Chemical Corporation inquired about the purchase of a Viking heavy duty series 335 "P" size pump, motor and skid (solid); see the attached document (Q21a_McCall to PGE Equip Purchase 1993.pdf). To the best of PGE's knowledge, after reasonable inquiry, PGE has no knowledge that this pump was sold to McCall Oil and Chemical Corporation. <p><u>Oil-Filled Equipment</u></p> <p>See the attached documents (Q21a_2009_Oil Filled Equip in Service-Substation.pdf and</p>	<p>Q21a_NonHaz WAL_Docs.pdf Q21a_Waste Profiles.pdf Q21a_NonHaz Waste Manifest 2007-02-28.pdf</p> <p>Also see Question 15 Attachments Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see Question 19 Attachments Q19_1985-10-09 SPCC.pdf Q19_1996-03-05 SPCC.pdf Q19_1997-07-28 SPCC.pdf Q19_1999-02-23 SPCC.pdf Q19_2003-02-14 SPCC.pdf Q19_2003-12-15 SPCC.pdf</p> <p>Also see Question 33 Attachment Q33_EMC List.pdf</p> <p>Also see Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf</p> <p>Also see Question 50 Attachment Q50_2002-04-19 PGE Doc. Sub. to US EPA.pdf</p> <p>Also see Question 62 Attachments Q62_1988-05-20_Spill Report.pdf Q62_1994-03-17_Spill Report.pdf Q62_1994-08-25_Spill Report.pdf Q62_1995-02-09_Spill Report.pdf Q62_1997-02-24_Spill Report.pdf Q62_1997-07-25_Spill Report.pdf Q62_1997-12-04_Spill Report.pdf Q62_1997-12-05_Spill Report.pdf Q62_2000-08-07_Spill Report.pdf Q62_2000-11-14_Spill Report.pdf Q62_2001-04-27_Spill Report.pdf Q62_2002-03-19_Spill Report.pdf Q62_2002-04-02_Spill Reports.pdf Q62_2004-11-01_Spill Report.pdf Q62_2006-09-21_Spill Report.pdf Q62_2007-04-11_Spill Report.pdf Q62_2007-10-29_Spill Report.pdf Q62_2000-02-04 Email about a Dec 1997 spill.pdf</p>

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	<p>Q21a_2009_Oil Filled Equip in Service-Switchyard.pdf) for the list of oil-filled equipment (solid, liquid-filled) currently in use at the substation and switchyard. In addition, non-leaking surplus (used) electrical equipment (< 50 ppm PCBs) (solid, liquid-filled) is currently stored at the Harborton Substation, at the east and west equipment storage yards. See the attached document (Q21a_2009_Stored Oil Filled Equipment.pdf) for a list of the surplus electrical equipment currently stored at the Harborton Substation (as of May 2009). This list represents is a single day "snap shot" of the types and quantity of surplus electrical equipment stored at the Harborton Substation; types and quantities of surplus electrical equipment vary on a day-by-day basis. These documents also identify the PCB concentrations of the oil-filled equipment currently at the Harborton Substation. In addition, the attached document (Q21a_2007-09-00 Substation Equipment List.pdf) lists the equipment operated and stored at the Harborton Substation in September 2007.</p> <p>Inventories of oil-filled equipment (solid) historically present at the site have also been completed at various times in the past. The attached document (Q21a_2007-09-00 Substation Equipment List.pdf) lists the equipment operated and stored at the Harborton Substation in September 2007. The attached documents (Q21a_1985-01-17_Oil Filled Equipment.pdf; Q21a_1986-11-07_Oil Filled Equipment.pdf, and Q21a_1985_Inventory Sheet for Harborton.pdf) describe PGE's oil-filled equipment operated and stored at the Harborton Substation in 1985 and 1986. In addition, oil-filled equipment operated and stored at the Harborton Substation in 1985, 1996, 1997, 1999, and 2003 are listed in the SPCC plans (Q19_1985-10-09 SPCC.pdf, Q19_1996-03-05 SPCC.pdf, Q19_1997-07-28 SPCC.pdf, Q19_1999-02-23 SPCC.pdf, Q19_2003-02-14 PCC.pdf, and Q19_2003-12-15 SPCC.pdf) attached in response to Question 19.</p> <p><u>Wastes</u></p> <p>To the best of PGE's knowledge, after reasonable inquiry, those companies/persons with whom PGE currently has arrangements for disposal/recycling/destruction of wastes and/or used material are listed in the attached document (Q21a_Waste Stream Summary.pdf). The document summarizes the current various waste stream types, the current initial carrier, the current interim storage (if applicable), the current secondary carrier (if applicable), and the current disposal/recycling facility. To the best of PGE's knowledge, after reasonable inquiry, the companies/persons with whom PGE has made arrangements for disposal/recycling/destruction of wastes and/or used material for PGE properties in Oregon are listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40.</p> <p>The wastes generated from current operations/activities at the Harborton Substation include maintenance waste: aerosol cans from paints, solvents, and cleaners (solid), aerosol can drainings from paints, solvents, and cleaners (liquid), light bulbs (solid), lamp ballasts (solid), batteries (solid), and transformer/equipment oil (liquid). Wastes generated in the past are similar to those generated currently, but also included asbestos (solid) and consolidated waste from other locations such as obsolete equipment (solid), drained oil (liquid), and bead blast waste (solid). In general, these wastes varied/vary in quantity. The following summarizes the wastes generated, stored, and handled at the Harborton Substation:</p>	

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	<p><u>Historical Power Generation</u> Operation of the power turbines was conducted with direct supervision. To the best of PGE's knowledge, after reasonable inquiry, the only wastes produced during the historical power generation operations was maintenance waste, similar to above. Asbestos (solid), scrap metal (solid), and a non-leaking capacitor (solid) were removed from the Harborton Substation in 1986/1987; see the attached document (Q21a_1987-2002 Bills of Lading.pdf).</p> <p><u>Distribution Substation and Switchyard</u> Most of the functions of a substation and switchyard are automatic and occur without direct supervision. No wastes, including municipal wastes, are generated during regular operations. Periodically, equipment is taken out of service for off-site maintenance. During these periods, maintenance waste is generated; see the attached available document (Q21a_NonHaz Waste Manifest 2007-02-28.pdf). From 1995/1996 to 2002, obsolete equipment and other wastes were consolidated onsite with off-site waste prior to disposal; see the information under "Maintenance Building." To the best of PGE's knowledge, after reasonable inquiry, prior to 1995 and since 2003, obsolete equipment and other wastes are either sent directly to waste disposal facility or sent to a PGE waste and handling facility (e.g., PSC) prior to disposal; see the attached document (Q21a_PGE Transport Docs.pdf).</p> <p><u>Utility Pole Storage Yard</u> In addition to new utility poles, the pole storage yard also contains used utility poles (solid). Pole "butts" (lower more heavily pre-treated section of the poles) are removed and disposed of separately from the rest of the pole. For more information on pole treatment and disposal please see the separate 104(e) response Miscellaneous Spills, Distribution Network, and Submerged Cables.</p> <p><u>Maintenance Building</u> From approximately 1995/1996 to 2002, the maintenance building was used for the temporary storage, packaging, and consolidation of various quantities of onsite and off-site PCB-containing electrical equipment (solid), drained oil (liquid), and other wastes including bead blast waste (solid) and spill response excavated soil (solid) and cleanup materials (solid), prior to off-site disposal. See the attached available waste disposal and testing documents (Q21a_1994 PGE-CWM Letter.pdf, Q21a_1987-2002 Bills of Lading.pdf, Q21a_1995-2-04 Oil Data.pdf, Q21a_1996-05-01 Oil & Water Data.pdf, Q21a_1996-05-02 Oil Data.pdf, Q21a_1998-04-14 Oil Data.pdf, Q21a_2002-04-18 Oil Data.pdf, Q21a_2002 Capacitor Disp Order Form.pdf, Q21a_Certs of Disposal.pdf, Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf, Q21a_Items for Disposal 2002-01-09.pdf, Q21a_NonHaz WAL_Docs.pdf, and Q21a_Waste Profiles.pdf). Also see the document (Q50_2002-04-19 PGE Doc. Sub. to US EPA.pdf) attached in response to Question 50.</p> <p>In addition, water (liquid) from off-site electrical vaults was filtered using a carbon</p>	

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	<p>filtration system adjacent to the maintenance building, prior to off-site disposal/recycling. Filtered vault water was then transported to PSC and disposed of into the sanitary system under a COP batch disposal permit. Prior to disposal the water is tested for PCBs and total petroleum hydrocarbons (TPH). The results for disposal events between 1996 and 2002 are presented in the attached document (Q21a_1996-2002 Batch Dis. Request.pdf); reported PCB concentrations were non-detect and TPH concentrations were low. The paper filters (solid) and spent carbon (solid) were consolidated along with other PCB-containing materials for disposal.</p> <p><u>Spills and Releases</u> To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the spills and releases that have occurred at the Harborton Substation and the resulting wastes generated.</p> <ul style="list-style-type: none"> • May 20, 1988 — An oil filter truck spilled 20 gallons of PCB-containing (40 ppm) transformer oil (liquid) onto the soil/gravel inside the Harborton Substation; see the document (Q62_1988-05-20_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the oil- and PCB-containing soil/gravel (solid) and absorbent (solid) generated during the cleanup were likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • March 17, 1994 – A breaker spilled 10 to 15 gallons of PCB-containing (51 ppm) oil (liquid) onto gravel at the Harborton Substation; see the document (Q62_1994-03-17_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the PCB- and oil-contaminated soil/gravel (solid) generated during the cleanup was likely transported and disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility. • August 25, 1994 — Oil (liquid) spilled near AST #2 across an area of 38 feet by 26 feet; see the maintenance request form (Q62_1994-08-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the oil-contaminated soil/gravel (solid) generated during the cleanup was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. 	

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	<ul style="list-style-type: none"> February 9, 1995 — A bushing spilled 5 gallons of oil (liquid) onto the soil at the Harborton Substation; see the document (Q62_1995-02-09_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. The oil was analyzed; however, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer has knowledge of the PCB-content of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the petroleum hydrocarbon- and PCB-containing soil/gravel (solid) generated during the cleanup was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content after interim storage at a PGE waste and material handling facility. February 24, 1997 — A 1500 kVA transformer spilled approximately 20 gallons of PCB-containing (19 ppm) oil (liquid) onto soil and gravel at the Harborton Substation during an attempted break-in and bushing theft; see the document (Q62_1997-02-24_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the petroleum hydrocarbon- and PCB-containing soil/gravel (solid) generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. July 25, 1997 — A breaker spilled 3 gallons of PCB-containing (< 5 ppm) oil (liquid) onto the soil/gravel at the Harborton Substation; see the document (Q62_1997-07-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the petroleum hydrocarbon and PCB-containing soil/gravel (solid) generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. December 4, 1997 — An above ground oil tank associated with a non-functioning submerged cable terminal was vandalized, resulting in a release of approximately 40 gallons of cable oil (liquid) onto the soil (solid) near the southern boundary of Parcel A; see the document (Q62_1997-12-04_Spill Report.pdf) attached in response to Question 62. The following day, a second spill report was completed suggesting a second spill occurred in the same area; see the document (Q62_1997-12-05_Spill Report.pdf) attached in response to Question 62. However, it was later determined that the oil observed on 5 December 1997 was from the spill that had occurred the previous day; see the document (Q62_2000-02-04 Email about a Dec 1997 spill.pdf) attached in response to Question 62. The spill was located under the BPA transmission tower near the southern boundary of Parcel A, approximately 200 feet 	

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	<p>from the Willamette River. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). PGE later removed the entire structure including the oil reservoir; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Although the oil was analyzed, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer knows the exact PCB-content, if any, of the spilled oil; however, it was classified as non-PCB (< 50 ppm). The Toxic Substance Control Act (TSCA) regulation standard and accepted industry standard is to use the term "non-PCB" to describe oils with < 50 ppm PCBs; this term is used throughout this document. To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), any remaining oil in the reservoir would likely have been drained and either recycled (in house or by Environmental Management) or incinerated (by Transformer Technologies); the equipment would most likely have been scrapped at Coleman metals; and the petroleum hydrocarbon- and PCB-containing soil/gravel (solid) was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> • August 7, 2000 — A spare breaker bushing spilled approximately 2 gallons of transformer oil (liquid) onto soil; see the document (Q62_2000-08-07_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic yard of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the oil-contaminated soil/gravel (solid) was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • November 14, 2000 — A 16.8 mVA transformer spilled approximately 2 gallons of PCB-containing (3 ppm) oil (liquid) onto soil and concrete; see the document (Q62_2000-11-14_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 2.5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the PCB- and oil-contaminated soil/gravel (solid) was likely disposed of at the Hillsboro Landfill or Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • April 27, 2001 — A transformer spilled approximately 10 gallons of PCB-containing (21 ppm) oil (liquid) onto a Wilhelm truck and trailer, as well as the surrounding soil/gravel; see the document (Q62_2001-04-27_Spill Report.pdf) attached in 	

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	<p>response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including washing of the vehicle and the removal of contaminated wash water and soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the PCB- and oil-contaminated soil/gravel (solid) was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. To the best of PGE's knowledge, after reasonable inquiry, the wash water (liquid) was either solidified and disposed of with the contaminated soil/gravel or may have been treated like vault water for disposal purposes.</p> <ul style="list-style-type: none"> • 2001 – During the Harborton Substation Pre-RI Investigation, PGE assessed the nature and extent of soil and groundwater contamination associated with site activities/operations and past spills/release at the Harborton Substation. The Pre-RI identified several areas within the Harborton Substation with petroleum hydrocarbon-impacted soil (solid), at which PGE elected to complete limited source removal actions (excavation and off-site disposal). A total of 11.08 tons of soil were excavated from five small areas in August 2001 and disposed of at the Hillsboro Landfill; see Appendix D of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. These areas targeted soils with total petroleum hydrocarbon concentrations greater than 1,000 ppm and were located near the rail car unloading area, in the switchyard, adjacent to the fuel transfer station, next to AST #2, and at the cable crossing location near the southern boundary of Parcel A. These areas are depicted in Figure 23 of the Pre-RI Report. Also see the attached document (Q21a_2001 IDW Inventory Form.pdf). • March 19, 2002 — A 69 kVA transformer spilled approximately 0.5 gallon of PCB-containing (41 ppm) oil (liquid) onto soil and gravel within the substation; see the document (Q62_2002-03-19_Spill Report.pdf) attached in response to Question 62. Laboratory analysis indicated that the oil had a PCB concentration of 41 ppm. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the PCB- and oil-contaminated soil/gravel (solid) was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • April 2, 2002 — A transformer spilled approximately 0.5 cup of PCB-containing (56 ppm) oil (liquid) onto the gravel within the Harborton Substation; see the document (Q62_2002-04-02_Spill Reports.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in 	

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	<p>response to Question 21a, the PCB- and oil-contaminated soil/gravel (solid) was likely disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> • April 2, 2002 — A transformer spilled approximately 1 cup of PCB-containing (23 ppm) oil (liquid) onto the gravel within the Harborton Substation; see the document (Q62_2002-04-02_Spill Reports.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the PCB- and oil-contaminated soil/gravel (solid) was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • November 1, 2004 — A transformer capacitor spilled an unknown quantity of oil (liquid) onto the asphalt within the Harborton Substation; see the document (Q62_2004-11-01_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated absorbent). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the oil-contaminated absorbent (solid) was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • September 21, 2006 — A Wilhelm truck spilled 10 gallons of hydraulic oil (liquid) onto the gravel in the rear storage area of Harborton Substation; see the document (Q62_2006-09-21_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 0.5 yards of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the oil-contaminated soil/gravel (solid) was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • April 11, 2007 — A contractor boom truck spilled 22 gallons of hydraulic oil onto soil and gravel within the Harborton Substation Pole Yard; see the document (Q62_2007-04-11_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 10 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the oil-contaminated soil/gravel (solid) was likely disposed of at the Hillsboro Landfill or the 	

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	<p>Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> October 29, 2007 — Vandals trying to remove a bushing caused a 750 kVA transformer to spill approximately 10 gallons of PCB-containing (5 ppm) transformer oil (liquid) onto the soil and gravel within the Harborton Substation; see the document (Q62_2007-10-29_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the attached document (Q21a_Waste Stream Summary.pdf), the PCB- and oil-contaminated soil/gravel (solid) was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. <p>Also see the documents (Q15_1998-07-06 Phase I Env Site Assessment.pdf, Q15_Bridgewater-HAI 2001 Phase I and II.pdf, and Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15, as well as the response to Questions 5g, 13k, 16, and 21c.</p>	
b. the chemical composition, characteristics, physical state (e.g., solid, liquid) of each waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;	See the response to Question 21a, which includes the information concerning chemical composition, characteristics, and physical state of each waste or material.	
c. how each such waste or material was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you; and	<p>To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the handling of waste and materials at the Harborton Substation currently (2003 to present), recently (1995/1996 to 2002), and historically (pre-1995). Please note, to the best of PGE's knowledge, after reasonable inquiry, PGE has limited knowledge of the historical (pre-1995) material and waste handling at the Harborton Substation.</p> <p><u>Materials</u> Maintenance materials are currently not stored on site. Various supplies/materials (e.g., concrete forms, tools, and utility poles) are/were stored in specific storage areas at the Harborton Substation. In addition, operational materials (e.g., fuel) were historically stored at the Harborton Substation. For further details on the materials storage areas at the Harborton Substation, see the response to Question 16.</p> <p><u>Oil-Filled Equipment</u> Currently, non-leaking surplus electrical equipment (< 500 ppm PCBs) is stored at the Harborton Substation. From 1988 to 2002, new and surplus electrical equipment (< 500 ppm PCBs) was stored at the Harborton Substation. In addition, there is/was oil-filled equipment currently and historically used in operations at the property. See the response to Questions 16 and 21a for further details. All equipment is/was handled by trained PGE personnel.</p>	<p>Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_1976-01-23 Oil Strge and Trans Man.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf Q21c_HID and Fluorescent Tube Storage Instructions.pdf Q21c_PGE Aerosol Can Disposal Flowchart 2006.pdf Q21c_PGE Battery Flow Chart 2007.pdf Q21c_PGE Bulb & Tube Recycling Flowchart 2006.pdf Q21c_PGE Transport Docs.pdf</p> <p>Also see all Question 15 Attachments</p> <p>Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf</p> <p>Also see all Question 62 Attachments</p>

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	<p><u>Wastes</u> Historically, wastes and used materials from within the Investigation Area were transported either directly to the appropriate disposal facility or to one of PGE's waste and material handling facilities at Sellwood Substation (located at 8856 SE 13th Avenue), Portland Service Center (PSC) (located at 3700 SE 17th Avenue, Portland, Oregon), Wilsonville (located at 9480 SW Boeckman Rd, Wilsonville, Oregon - only soil/gravel with < 50 ppm PCBs), for interim storage prior to disposal/recycling/destruction. From 1995/1996 to 2002, Harborton Substation was also utilized as a PGE waste and used material handling facility for temporary storage, packaging, and consolidation of various quantities of onsite and off-site PCB-containing capacitors, drained oil, other obsolete equipment (e.g., bushings, transformers, breakers, regulators, etc), and other wastes.</p> <p>Currently, wastes and used materials that are not transported directly to the appropriate disposal facility are transferred to the current waste and material handling facilities (PSC and Wilsonville [only soil/gravel with < 50 ppm PCBs]) for interim storage prior to disposal/recycling/destruction.</p> <p>Materials potentially contaminated with PCBs are sealed in barrels and transferred to PGE's waste and material handling facility (currently at PSC). Once received at the waste and material handling facility, these wastes are tested to determine a disposal location appropriate for their PCB concentration. These wastes include:</p> <ul style="list-style-type: none"> • Used/excess lubricants, oils, and other fluids • Obsolete equipment (e.g., transformers, capacitors) • Rags used to clean equipment • Absorbent material used to clean up leaks or spills • Ballasts <p>Wastes not contaminated with PCBs (< 50 ppm) are containerized separately and transferred to PGE's waste and material handling facility (currently at PSC). Non-PCB wastes include:</p> <ul style="list-style-type: none"> • Solvents • Batteries • Scrap metal • Light bulbs • General garbage and recycling <p>Soil and gravel removed during excavations (from upgrades or equipment spill response) are tested and disposed of appropriately. The soil and gravel are either transported directly from the site to the disposal facility, or are transported to Wilsonville and/or PSC for interim storage before bulk disposal at a location dependant upon PCB content. See the response and documents attached for Question 21a for how the known remediation wastes were handled by PGE.</p>	

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	<p>See the attached 1976 operations manual excerpt (Q21c_1976-01-23 Oil Strge and Trans Man.pdf). See the attached documents for descriptions of PGE's waste and used material handling procedures. The attached mercury spill cleanup guide (Q21c_Cleaning Up Small Mercury Spills 2008.pdf) is a general PGE guidance and does not imply that mercury spills have ever occurred at the Harborton Substation. Also see the response and documents for Questions 15, 16, 21a, 52, and 62.</p> <p>See the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from Harborton Substation (Supplemental Submittal S7).</p>	
<p>d. the quantity of each such waste or material used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you.</p>	<p>See the response and documents for Questions 15, 16, 21a, 21c, and 62. Also see the waste and materials documentation provided in the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7).</p>	<p>All Question 21 Attachments</p> <p>Also see all Question 15 Attachments</p> <p>Also see all Question 62 Attachments</p>
<p>22. Describe all activities at each Property that was conducted over, on, or adjacent to, the Willamette River. Include in your description whether the activity involved hazardous substances, waste(s), or materials and whether any such hazardous substances, waste(s), or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located in the Willamette River.</p>	<p>Harborton Substation (Parcel A), Parcel B, Parcel C, and Parcel F are adjacent to the Willamette River. Other than historical PGE operation of the ship-to-shore petroleum transfer and piping facility at the GP docking facility (south of Parcels A and C), PGE did not conduct any activities, over, on, or adjacent to the Willamette River. To the best of PGE's knowledge, after reasonable inquiry, no releases into the Willamette River occurred during the historic fuel operations activities at the GP docking facility.</p> <p>PGE subleased the aquatic lands adjacent to the Harborton Substation (Parcel A) and/or Parcel B to other companies for the purposes of moorage and log raft storage; see the responses to Questions 6c and 7.</p>	
<p>23. For each Property at which there was or is a mooring facility, dock, wharf or any over-water structure, provide a summary of over-water activities conducted at the structure, including but not limited to, any material loading and unloading operations associated with vessels, materials handling and storage practices, ship berthing and anchoring, ship fueling, and ship building, retrofitting, maintenance, and repair.</p>	<p>PGE subleased the aquatic lands adjacent to the Harborton Substation (Parcel A) and/or Parcel B to other companies for the purposes of moorage and log raft storage; see the responses to Questions 6c and 7.</p>	

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<p>24. Describe all activities conducted on leased aquatic lands at each Property. Include in your description whether the activity involved hazardous substances, waste, or materials and whether any such hazardous substances, waste, or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located on such leased aquatic lands.</p>	<p>PGE subleased the aquatic lands adjacent to the Harborton Substation (Parcel A) and/or Parcel B to other companies for the purposes of moorage and log raft storage; see the responses to Questions 6c and 7. To the best of PGE's knowledge, after reasonable inquiry, no hazardous substances, wastes, or materials were discharged, spilled, disposed of, or otherwise came to be located on the leased aquatic lands.</p>	
<p>25. Please describe the years of use, purpose, quantity, and duration of any application of pesticides or herbicides on each Property during the period of investigation (1937 to the present). Provide the brand name of all pesticides or herbicides used.</p>	<p>Several herbicides have been used at Harborton Substation to control vegetation growth.</p> <p>According to the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15, herbicides were used on approximately 10 acres of the site to prevent electrical faults caused by vegetation in the 115kV switchyard and distribution station. Spot application of herbicides was also made along the railroad tracks, graveled roads outside the fence, around valve boxes, etc. The application of all herbicides was performed by licensed PGE applicators in accordance with manufacturer recommendations. No insecticides, such as DDT, were ever applied at the Harborton Substation.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, PGE does not know what herbicides were used at the Harborton Substation from 1972/1973 to 1976.</p> <p>From 1979 through 2007, one or more herbicides (i.e., Simazine 80, Oust, Diuron, Princep, Pendulum, Landmark, Portfolio, and/or Garlon4) were used at Harborton Substation. To the best of PGE's knowledge, after reasonable inquiry, the following are the quantities applied (when applied):</p> <ul style="list-style-type: none"> • Simazine 80 (2-chloro-4,6-bis(ethylamino)-s-triazine) – 8 lbs per acre • Oust (sulfometuron methyl) – 2 to 3 oz per acre • Diuron (N'-(3,4-dichloropnehy)-N,N-dimethylurea) – 4 to 6 lbs per acre • Princep (Simazine) – 5 lbs per acre • Pendulum – 5 lbs per acre • Landmark – 4.5 oz per acre • Portfolio – 4 oz per acre • Garlon4 (3,5,6-trichloro-2-pyridinyloxyacetic acid) – as needed for spot brush control <p>See the attached document (Q25_HarbortonHerbAppHistory.pdf) for further details on the known herbicide application history. Also see appendix A of the Pre-RI Work Plan (Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf), which provides an assessment of the herbicides used at the Harborton Substation.</p>	<p>Question 25 Attachment Q25_HarbortonHerbAppHistory.pdf</p> <p>Also see Question 15 Attachments Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf</p>

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	To the best of PGE's knowledge, after reasonable inquiry, PGE does/did not apply pesticides or herbicides at Parcels B through G or at Parcel H during its historical ownership.	
26. Describe how wastes transported off the Property for disposal are and ever were handled, stored, and/or treated prior to transport to the disposal facility.	<p>During power generation operations between 1973 and 1980, the Generating Plant burned natural gas or distillate fuels and produced few wastes. Wastes would have been produced as a result of routine maintenance (e.g., dirty rags, empty grease or paint containers, etc). Any maintenance wastes produced on site (during the operation of the turbines, substation, switchyard, etc) would have been either transported directly to the appropriate disposal facility or transported to a PGE waste and material handling facility for interim storage prior to disposal/recycling/destruction. Prior to 1995, Sellwood Substation, PSC, and Wilsonville (only soil/gravel with < 50 ppm PCBs) were PGE waste and used material handling facilities.</p> <p>From approximately 1995/1996 to 2002, Harborton Substation also served as a PGE waste and material handling facility. The maintenance building and surrounding area were used for the temporary storage, consolidation, management, and packaging of onsite and off-site PCB-containing electrical equipment, drained electrical equipment oil, and spill response excavated soil and clean up material prior to off-site disposal. Obsolete equipment oil draining activities only occurred within the maintenance building. In addition, water from off-site electrical vaults was filtered using a carbon filtration system adjacent to the maintenance building, prior to off-site disposal/recycling.</p> <p>Since 2003, any wastes produced at Harborton Substation are sent directly to the disposal facility or to one of PGE's current waste and used material handling facilities, either PSC or Wilsonville (only soil/gravel with < 50 ppm PCBs).</p> <p>For further waste information, see the response and documents for Questions 16, 21, and 52, as well as the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15.</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see all Question 21 Attachments</p> <p>Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf</p>
27. Has Respondent ever arranged for disposal or treatment or arranged for transportation for disposal or treatment of materials to any Property (including the Willamette River) within the Investigation Area? If so, please identify every Property that Respondent's materials were disposed or treated at in the	<p>To the best of PGE's knowledge, after reasonable inquiry, waste and materials were not disposed of at the Harborton Substation. To the best of PGE's knowledge, after reasonable inquiry, no wastes were disposed of into the Willamette River.</p> <p>From 1995/1996 to 2002, water from off-site electrical vaults was transported to the Harborton Facility and carbon filtered, prior to off-site disposal/recycling. See the responses to Questions 16 and 21 for further details.</p>	

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<p>Investigation Area. In addition, identify:</p> <p>a. the persons with whom the Respondent made such arrangements;</p>	<p>In general, waste and used materials from within the Investigation Area are either transported directly to the appropriate disposal facility or transported to a PGE waste and material handling facility for interim storage prior to disposal/recycling/destruction. The Harborton Substation operated as a waste and material handling facility between 1995/1996 and 2002. Historically, PGE's waste and material handling facilities also included Sellwood Substation, PSC, and Wilsonville (only soil/gravel with < 50 ppm PCBs). Currently, PGE's waste and material handling facilities are PSC and Wilsonville (only soil/gravel with < 50 ppm PCBs).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, companies with which PGE has made arrangements for disposal/recycling/destruction of wastes and/or used material for PGE properties in Oregon are listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40. To the best of PGE's knowledge, after reasonable inquiry, those companies currently used are listed in the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a. Of those listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40, those companies within the Investigation Area are summarized in the attached document (Q27_Waste-Materials Receivers within IA.pdf) and include the following:</p> <ul style="list-style-type: none"> • Acme Trading & Supply – located at 4927 NW Front Ave, Portland, OR • AGG Enterprises Inc. – located at 555 N Channel Ave, Portland, OR • Ash Grove Cement Company – located at 13939 N Rivergate Blvd, Portland, OR • Bingham Willamette (now Sulzer Pumps) – located at 2800 NW Front Ave, Portland, OR • Calbag Metals – located at 2495 NW Nicolai St and 12005 N Burgard Way, Portland, OR • Cascade General Inc – located at 5555 N Channel Rd, Portland, OR • General Electric Company – located at 2535 NW 28th Ave, Portland, OR • Northwest Natural Gas Co – located at 123 NW Flanders, Portland, OR • Nudleman & Sons – located at 2707 NW Nela, Portland, OR • Oregon Hydrocarbon/TPS Technologies – located at 9333 N Harbortgate St, Portland, OR • Port of Portland – located at 121 NW Everett Street, Portland, OR • Schnitzer Steel – located at 3200 NW Yeon Ave and 12005 N Burgard Way, Portland, OR • Tyee Construction Company of Oregon – located at 12005 Burgard Way, Portland, OR • Univar – located at 3950 NW Yeon Ave and 10821 N Lombard St, Portland, OR • Western Steel Cast – located at 3700 SW Moody, Portland, OR <p>To the best of PGE's knowledge, after reasonable inquiry, General Electric Company (listed above in bold) is the only company that has been identified as both within the Investigation Area and having received waste from the Harborton Substation based on the response and documents attached in response to Question 21a. General Electric Company (GE) received obsolete transformers, bushings, other electrical equipment, and drained oil (e.g., from</p>	<p>Question 27 Attachment Q27_Waste-Materials Receivers within IA.pdf</p> <p>Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf</p> <p>Also see Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf</p>

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	<p>transformers and bushings); see the hazardous waste manifests in the document (Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf) attached in response to Question 21a.</p> <p>The other (non-bold) companies listed above have historically received or currently receive waste and/or used materials from the PGE waste and material handling facilities, which may have included waste and/or used material from the Harborton Substation. See the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton substation (Supplemental Submittal S7).</p>	
<p>b. every date on which Respondent made such arrangements;</p>	<p>The only company positively identified by PGE as having received waste or used material from the Harborton substation is GE (listed in bold in response to Question 27a). The Harborton Substation (Parcel A) operated as the waste and material handling facility between 1995/1996 and 2002. From May 1995 to August 2001, GE received multiple shipments of obsolete transformers, bushings, other electrical equipment, and drained oil (e.g., from transformers and bushings); see the hazardous waste manifests in the document (Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf) attached in response to Question 21a.</p> <p>Additional available general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton substation (Supplemental Submittal S7) and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).</p>	<p>See Question 21 Attachment Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf</p>
<p>c. the nature, including the chemical content, characteristics, physical state (e.g., solid, liquid) and quantity (volume and weight) of all materials involved in each such arrangement;</p>	<p>The Harborton Substation (Parcel A) operated as a PGE waste and material handling facility between 1995/1996 and 2002. Other historical PGE waste and material handling facilities included the Sellwood Substation, PSC, and Wilsonville (only soil with < 50 ppm PCBs). Currently, PGE's waste and material handling facilities are PSC and Wilsonville (only soil/gravel with < 50 ppm PCBs). Wastes generated and/or managed at the Harborton Substation are/were either transported directly to the disposal/recycling facility or are/were transported to a PGE waste and material handling facility. For further details, see the response to Question 21. Also see the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, disposal/recycling facilities with which PGE has made arrangements for disposal/recycling of wastes for PGE properties in Oregon are listed in the document (Q40_Waste-Materials Receivers and Carriers.pdf) attached in response to Question 40. The document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a summarizes the current various waste stream types, the current initial carrier, the current interim storage (if applicable), the current secondary carrier (if applicable), and the current disposal/recycling facility. Of those listed, the following is a description of the waste and used material disposed/recycled at facilities within the Investigation Area:</p> <ul style="list-style-type: none"> • Acme Trading & Supply – Used (but not obsolete) transformers (solid) and ballasts (solid) • AGG Enterprises Inc. – Mixed non-hazardous waste (various) and recyclables 	<p>See Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf</p> <p>Also see Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf</p>

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	<ul style="list-style-type: none"> Ash Grove Cement Company – PCB waste: oil (liquid) with PCBs < 50 ppm Bingham Willamette (now Sulzer Pumps) – Used (but not obsolete) transformers (solid) and oil circuit breakers (solid) Calbag Metals – Scrap metal (solid) and empty aerosol cans (solid) Cascade General Inc – Non-hazardous liquid waste/material: mineral oil (liquid) with PCBs < 50 ppm General Electric Company – Oil with PCBs ≥ 50 ppm (liquid) and obsolete equipment (solid) with trace levels of PCBs ≥ 50 ppm Used (but not obsolete) transformers (solid) Northwest Natural Gas Co – Transformer oil (liquid) Nudleman & Sons – Scrap copper (solid) Oregon Hydrocarbon/TPS Technologies – Solidified contents of USTs (solid) and petroleum hydrocarbon-contaminated soil (solid) Port of Portland – Used (but not obsolete) transformers (solid) and ballasts (solid) Schnitzer Steel – Scrap metal (solid) and empty aerosol cans (solid) Tyee Construction Company of Oregon – Transformers (solid) Univar – Used transformer/insulating oil (liquid, <1 ppm PCBs), used rags/absorbent material from leaks or spills (solid, >50 ppm PCBs), and used transformer/insulating oil (liquid, ≥ 50 ppm PCBs) Western Steel Cast – Transformers (solid) <p>To the best of PGE's knowledge, after reasonable inquiry, General Electric Company (listed above in bold) is the only company that has been identified by PGE as having received waste or used material from the Harborton Substation based on the response and documents for Question 21a. From May 1995 to August 2001, GE received multiple shipments of obsolete transformers, bushings, other electrical equipment, and drained oil (e.g., from transformers and bushings); see the hazardous waste manifests in the document (Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf) attached in response to Question 21a.</p> <p>The other (non-bold) companies listed above have historically received or currently receive waste and/or used materials from the PGE waste and material handling facilities, which may have included waste and/or used material from the Harborton Substation. Also see the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7).</p>	
d. in general terms, the nature and quantity of the non- hazardous materials involved in each such arrangement;	See the response to Question 27c.	
e. in general terms, the nature and quantity of any hazardous materials involved in each such arrangement;	See the response to Question 27c.	
f. the owner of the materials involved in each such arrangement, if not	Not applicable. PGE was the generator of the waste.	

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Respondent;		
g. all tests, analyses, analytical results or manifests concerning each hazardous material involved in such transactions;	See the response to Question 27c.	
h. the address(es) for each Property, precise locations at which each material involved in such transactions actually was disposed or treated;	See the response to Question 27a.	
i. the owner or operator of each facility at which hazardous or non-hazardous materials were arranged to be disposed at within the Investigation Area;	See the response to Question 27a.	
j. who selected the location to which the materials were to be disposed or treated;	PGE personnel in charge of environmental matters and consultants. See the response and documents attached for Question 38, as well as the documents attached in response to Question 6g.	See all Question 6 Attachments See all Question 38 Attachments
k. who selected the Property as the location at which hazardous materials were to be disposed or treated; and	PGE personnel in charge of environmental matters and consultants. See the response and documents attached for Question 38, as well as the documents attached in response to Question 6g.	See all Question 6 Attachments See all Question 38 Attachments
l. any records of such arrangement and each shipment.	See the response to Question 27c.	
28. Describe the plants and other buildings or structures where Respondent carried out its operations at each Property within the Investigation Area (excluding locations where ONLY clerical/office work was performed).	<p>Harborton Substation buildings and structures include:</p> <p><u>Former Generating Plant (East Equipment Storage Yard)</u></p> <ul style="list-style-type: none"> Maintenance building – 35 feet by 4 feet steel panel construction, single-level building with high bay. <p><u>Distribution Substation</u></p> <ul style="list-style-type: none"> Control building – 10 feet by 12 feet prefabricated, steel panel construction, single-level building Transmission structure – open frame structural steel supporting 115kV bus Distribution structure – open frame structural steel supporting 13kV bus Capacitor racks – open frame structural steel supporting station capacitors and associated equipment. <p><u>AST Area</u></p> <ul style="list-style-type: none"> Two 4.2 million gallon ASTs Former pump station for fuels 	

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	<p><u>Rail Car Unloading Area</u></p> <ul style="list-style-type: none"> Former rail car unloading area <p><u>115 KV Switchyard</u></p> <ul style="list-style-type: none"> Control building -50 feet by 25 feet prefabricated, steel panel construction, single level building. Transmission structure – Open frame structural steel supporting 115kV bus Communication tower – Steel lattice structure. <p><u>Pole Yard</u></p> <ul style="list-style-type: none"> Covered storage structure (three sided) <p>For further details, see the response to Questions 13d and 16.</p>	
<p>29. Provide a schematic diagram or flow chart that fully describes and/or illustrates the Respondent's operations on each Property.</p>	<p>Historical operations on this property included building construction, equipment installation, power generation and distribution, equipment maintenance, equipment decommissioning and waste/used material handling and disposal.</p> <p>Current operations on this property are limited to equipment installation, power distribution (substation unmanned since 1985), equipment maintenance, and equipment decommissioning.</p> <p>See the attached documents (Q29_Substation Lifecycle.pdf and Q29_Harborton Operations Schematic.pdf)</p>	<p>Question 29 Attachments Q29_Substation Lifecycle.pdf Q29_Harborton Operations Schematic.pdf</p>
<p>30. Provide a brief description of the nature of Respondent's operations at each location on each Property including:</p>		
<p>a. the date such operations commenced and concluded; and</p>	<p>The following summarizes the major Harborton Substation (Parcel A) operations:</p> <ul style="list-style-type: none"> Generating Power Plant Operations and Fuel Transfer – 1973 to 1980 Substation Operation – 1973 to present Switchyard Operation – 1973 to present East Yard Equipment Storage – 1988 to present West Yard Equipment Storage – 1992 to present Utility Pole Storage – 1992 to present Supply storage (e.g., concrete forms, concrete blankets, and nuts and bolts) in the ASTs - 1993 to present Supply storage (e.g., parade float, desk, tools, etc) in Maintenance Building – 1985 to 1995; 2003 to present Waste and material handling (temporary storage, packaging, and consolidation of equipment and drained oil, as well as treating off-site vault water) in/adjacent to the 	

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	<p>Maintenance Building – 1995/1996 to 2002.</p> <ul style="list-style-type: none"> Spill response and clean up – occurred as needed. The first Harborton Substation spill report occurred on May 20, 1988 and the most recent occurred on October 29, 2007. Upon investigation, the potential spill that was reported on May 30, 1986, turned out to be a naturally occurring sheen and not a spill. <p>For further details, see the response to Questions 5g, 13k, 15, 16, 21, and 62.</p>	
<p>b. the types of work performed at each location, including but not limited to the industrial, chemical, or institutional processes undertaken at each</p>	<p><u>Generating Plant and Fuel Transfer</u></p> <p>Construction/deconstruction activities: Excavation, erection of support structures, welding, painting, wiring, carpentry, installing equipment, and assembly of large equipment. Disassembly and off site transport of gas turbines.</p> <p>Routine activities: Power generation and distribution, operation of equipment, routine maintenance, cleaning, inspection of equipment, minor painting, transfer of oil from supply tanks to equipment, transfer of oil between equipment and temporary storage tanks, renewal of lubricants and various consumable fluids, reconfiguration of equipment, upgrade of equipment components, and testing and calibration of equipment. Fuel transfer through pipelines to ASTs, adjustment of valves, fuel unloading from rail cars.</p> <p>Equipment maintenance activities: Maintenance of equipment, generation of maintenance waste, and disposal of maintenance waste.</p> <p><u>Switchyard and Distribution Substation</u></p> <p>Construction activities: Excavation, erection of support structures, welding, painting, wiring, carpentry, installing equipment, and assembly of large equipment.</p> <p>Routine activities: Power distribution, operation of equipment, routine maintenance, cleaning, inspection of equipment, minor painting, transfer of oil from supply tanks to equipment, transfer of oil between equipment and temporary storage tanks, renewal of lubricants and various consumable fluids, reconfiguration of equipment, upgrade of equipment components, and testing and calibration of equipment.</p> <p>Equipment maintenance activities: Maintenance of equipment, generation of maintenance waste, disposal of maintenance waste, and removal of obsolete equipment.</p> <p><u>Maintenance Building Area</u></p> <p>Construction activities: Excavation, erection of support structures, welding, painting, wiring, carpentry, installing equipment, and assembly of large equipment.</p> <p>Routine activities: Historical turbine maintenance.</p> <p>Supply Storage activities: Originally turbine maintenance storage (e.g., maintenance chemicals and parts), and past and current use is miscellaneous storage (e.g., parade float, desk, tools, etc).</p>	<p>See all Question 29 Attachments</p>

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	<p>Waste and material handling activities: Receiving off-site and onsite obsolete equipment and drained oil for temporary storage, consolidation, and packaging prior to off-site disposal. Also received and treated (carbon filtered) off-site vault water prior to disposal/recycling.</p> <p><u>Pole Yard</u> Construction activities: Road grading and construction, and fence erection.</p> <p>Storage activities: Placement, storage, movement, and inspections of new and used (obsolete) power poles and associated equipment.</p> <p>See the documents attached in response to Question 29, as well as the responses to Questions 5g, 13k, 15, 16, 21, 30a, and 62.</p>	
31. If the nature or size of Respondent's operations changed over time, describe those changes and the dates they occurred.	See responses to Questions 5g, 13d, 13k, 16, and 21.	
32. List the types of raw materials used in Respondent's operations, the products manufactured, recycled, recovered, treated, or otherwise processed in these operations.	<p>Historical power generation activities (1973 to 1980): When the Gas Turbine Generating Plant was operational, natural gas and distillate fuel were used.</p> <p>Recent waste handling activities (1995/1996 to 2002): The only raw material used at Harborton Substation for the waste handling activities at the maintenance building was activated carbon for the filtration of water collected from off-site electrical vaults.</p> <p>Substation and switchyard activities (1973 to present): No raw materials are/were used in the operation of the substation and switchyard. No products are/were manufactured, recycled, recovered, treated, or processed during operation.</p>	
33. Provide copies of Material Safety Data Sheets (MSDS) for materials used in the Respondent's operations.	The products/materials currently used at PGE properties within Oregon and potentially used at the Harborton Substation are listed in the attached document (Q33_08 EMC List.pdf). Material Safety Data Sheets (MSDS) for these products/materials are provided in a supplemental submittal (Supplemental Submittal S2). Products/materials used in the past are similar to those used currently.	Question 33 Attachment Q33_EMC List.pdf
34. Describe the cleaning and maintenance of the equipment and machinery involved in these operations, including but not limited to:	Substation Maintenance Activities: Routine visual inspections are performed once a month on most of the electrical equipment, including transformers, breakers, switches, regulators, motor operators, meters & relays, and batteries. Lighting systems are visually inspected and operation tests are performed once a month. Inspection of the control systems are performed	Question 34 Attachment Q34_Maintenance Activities.pdf Also see Question 21 Attachment

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	<p>as needed.</p> <p>Substation Cleaning Activities: Cleaning of electrical equipment varies. Large transformers are cleaned annually, breakers are cleaned based on the number of operations and time since the last inspection, switches are cleaned as needed, insulators are cleaned during scheduled outages, regulators are cleaned or replaced as needed, meters & relays are cleaned during routine calibration, batteries are cleaned approximately twice a year, and the non-electrical surfaces of control systems are cleaned during major construction.</p> <p>Historical Maintenance and Cleaning Activities: Similar to current substation electrical equipment maintenance and cleaning activities, but included maintenance and cleaning of engines, turbines, and generators.</p> <p>Please see the attached cleaning and maintenance activities document (Q34_Maintenance Activities.pdf) for further details, as well as the response and documents for Question 29, and the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a.</p>	<p>Q21a_Waste Stream Summary.pdf</p> <p>See all Question 29 Attachments</p>
a. the types of materials used to clean/maintain this equipment-machinery;	The primary materials that may have been used for equipment maintenance include transformer oil, solvents, denatured alcohol, degreasers, lubricating grease, hydraulic fluid, and paint.	
b. the monthly or annual quantity of each such material used.	To the best of PGE's knowledge, after reasonable inquiry, no detailed logs of exact quantities of maintenance materials used or oil/routine maintenance waste removed from the substations/properties are available.	
c. the types of materials spilled in Respondent's operations;	Materials potentially spilled during operations include oil and fluid from equipment spills or leaks.	
d. the materials used to clean up those spills;	<p>The following are PGE general spill response procedures.</p> <ul style="list-style-type: none"> • Minor equipment spills or leaks are cleaned up using sorbent materials. • Major spills are cleaned up using sorbent materials, berms, and necessary equipment. <p>For further details, see the responses and documents for Question 19 and the response and documents (Q21a_Waste Stream Summary.pdf and Q21c_Cleaning Up Small Mercury Spills 2008.pdf) attached for Question 21. The mercury spill cleanup guide is a general PGE guidance and does not imply that mercury spills have ever occurred at the Harborton Substation.</p>	<p>See all Question 19 Attachments</p> <p>Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf</p>
e. the methods used to clean up those spills; and	<p>Minor equipment spills or leaks are cleaned up as needed by wiping up the oil/fluid with on-hand absorbent materials.</p> <p>Major spills are immediately reported to the System Control Center. PGE's spill response crew is dispatched to clean up the oil. Soiled material is placed into a marked barrel and disposed of properly.</p> <p>For further details, see the responses and documents for Question 19 and the response and documents (Q21a_Waste Stream Summary.pdf and Q21c_Cleaning Up Small Mercury Spills 2008.pdf) attached for Question 21. The mercury spill cleanup guide is a general PGE guidance and does not imply that mercury spills have ever occurred at Harborton Substation.</p>	<p>See all Question 19 Attachments</p> <p>Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf</p>

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<p>f. where the materials used to clean up those spills were disposed of.</p>	<p>Materials potentially contaminated with PCBs are/were sealed in barrels and either transferred directly to the disposal facility or transferred to another PGE waste and material handling facility. The Harborton Substation operated as a waste and material handling facility between 1995/1996 and 2002. Historically, PGE's waste and material handling facilities included Sellwood Substation, PSC, and Wilsonville (only soil with < 50 ppm PCBs). Currently, PGE's waste and material handling facilities are PSC and Wilsonville (only soil with < 50 ppm PCBs).</p> <p>If the PCB concentration is not ascertainable from testing the equipment generating the spill, these wastes are tested to determine a disposal location appropriate for its PCB concentration once they are received at the waste and material handling facility.</p> <p>Materials containing PCBs are disposed at different facilities depending on the concentration of the originally spilled materials, if known, or the concentration in the waste materials.</p> <p>Wastes not contaminated with PCBs are containerized separately and transferred to PGE's waste and material handling facility (historically at Harborton Substation, Sellwood Substation, Wilsonville, or PSC; currently at PSC and Wilsonville). For further details, see the response and documents for Question 21.</p>	<p>See all Question 21 Attachments</p>
<p>35. Describe the methods used to clean up spills of liquid or solid materials during Respondent's operation.</p>	<p>Minor spills or leaks are cleaned up as they occur. The fluid is wiped up with on-hand absorbent materials. Major spills are immediately reported to the PGE System Control Center. PGE's spill response crew is dispatched to clean up the oil. Soiled material is placed into a marked barrel and disposed of properly.</p> <p>For further details, see the responses and documents for Question 19 and the response and documents (Q21a_Waste Stream Summary.pdf and Q21c_Cleaning Up Small Mercury Spills 2008.pdf) attached for Question 21. The mercury spill cleanup guide is a general PGE guidance and does not imply that mercury spills have ever occurred at this Site.</p>	<p>See all Question 19 Attachments</p> <p>Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21c_Cleaning Up Small Mercury Spills 2008.pdf</p>
<p>36. For each type of waste (including by-products) from Respondent's operations, including but not limited to all liquids, sludges, and solids, provide the following information:</p> <p>a. its physical state;</p> <p>b. its nature and chemical composition;</p> <p>c. its color;</p> <p>d. its odor.</p>	<p>PGE operational waste at the Harborton Substation (Parcel A) varies month to month and year to year. The following is a summary of the types of wastes generated from the historical and current operations at Harborton Substation (Parcel A).</p> <p>Remediation wastes include:</p> <p><u>Spill Responses</u></p> <ul style="list-style-type: none"> • Soil, gravel and/or absorbent materials – solid, petroleum hydrocarbons and/or PCBs, brown/black, petroleum hydrocarbon odor, various quantities, 1988 to 2007. For further details regarding known spills at the Harborton Substation, see the response and documents attached for Question 62. • Wash water – liquid or solidified, petroleum hydrocarbons and/or PCBs, brown/black, petroleum hydrocarbon odor, unknown quantity, 27 April 2001. For further details, 	<p>See all Question 15 Attachments</p> <p>Also see all Question 21 Attachments</p> <p>Also see Question 33 Attachment Q33_EMC List.pdf</p> <p>Also see all Question 62 Attachments</p>

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e. the approximate monthly and annual volumes of each type of waste (using such measurements as gallons, cubic yards, pounds, etc.); and	see the response and document (Q62_2001-04-27_Spill Report.pdf) attached in response for Question 62. Pre-RI Investigation <ul style="list-style-type: none"> Soil and gravel – solid, petroleum hydrocarbons, brown/black, petroleum hydrocarbon odor, 11.08 tons, August 2001. For further details, see the response and document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached for Question 15. <p>PGE waste and material handling facility (1995/1996 to 2002) wastes included:</p> <ul style="list-style-type: none"> Obsolete equipment (e.g., transformers, capacitors, bushings) – solid (typically drained), metal, various, metallic/petroleum hydrocarbon odor, various quantities, 1995/1996 to 2002. Drained equipment oil (e.g., transformer oil and bushing oil) – liquid, petroleum hydrocarbons and/or PCBs, brown/black, petroleum hydrocarbon odor, various quantities, 1995/1996 to 2002. Treated vault water – Liquid, clear, water with low levels of petroleum hydrocarbons, unknown odor, varying quantities, 1995/1996 – 2002. Paper filters and spent carbon filters – solid, carbon/paper with petroleum hydrocarbons and/or PCBs, various quantities, 1995/1996-2002 Empty crushed drums – Solid, metallic, unknown, unknown odor, varying quantities, 1997 and 2002. Bead blast dust – Solid, metallic, unknown color, unknown odor, 120 pounds, 2002. <p>General materials/wastes potentially contaminated with PCBs include:</p> <ul style="list-style-type: none"> Used/excess lubricants, oils, and other fluids – liquid, petroleum hydrocarbons, various, petroleum hydrocarbon odor, unknown, 1973-present Obsolete equipment (e.g., transformers, capacitors, bushings) – solid, metal, metallic/petroleum hydrocarbon odor, unknown, 1973-present Rags used to clean equipment – solid, fabric material, various, alcohol-petroleum hydrocarbon odor, unknown, 1973-present Absorbents used to clean up leaks or spills – solid, absorbent material, various, petroleum hydrocarbon odor, unknown, 1973-present Ballasts – solid, metallic, electrical lamp component, various, no odor, unknown, 1973-present <p>General materials/wastes not contaminated with PCBs include:</p> <ul style="list-style-type: none"> Solvents – liquid, oil-based chemical solvents, petroleum hydrocarbon smell, unknown quantity, 1973-present Batteries – solid, alkaline/zinc-carbon/lithium-based batteries, no odor, unknown quantity, 1973-present Scrap metal – solid, metallic (e.g., steel), none to metallic odor, unknown quantity, 1973-present Light bulbs – solid, incandescent and fluorescent light bulbs, no odor, unknown quantity, 1973-present 	
f. the dates (beginning & ending) during which each type of waste was produced by Respondent's operations.		

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	<ul style="list-style-type: none"> • General garbage – mixed composition, various colors, various odors, unknown quantity, 1973-present • Construction debris – mixed composition, various colors, various odors, unknown quantity, 1973-present • Asbestos waste – solid, asbestos, white, no odor, 1 to 3 cubic yards per disposal, 1987. • Soils removed during excavation for equipment/building demolition/installation – solid, soil, brown, organic odor, unknown, 1968-present • Used utility poles – solid, untreated cedar or wood pre-treated with wood preservatives (e.g., PCP, creosote, and copper-chromium-arsenic) , brown, unknown odor, 1992-present <p>Also see the MSDS documents provided in a supplemental submittal (Supplemental Submittal S2), the response to Question 16, the response and documents attached for Questions 15, 21, 33, and 62. Also see the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Rivergate Substations (Supplemental Submittal S7).</p>	
<p>37. Provide a schematic diagram that indicates which part of Respondent's operations generated each type of waste, including but not limited to wastes generated by cleaning and maintenance of equipment and machinery and wastes resulting from spills of liquid materials.</p>	<p>See the response and documents for Question 29, as well as the document (Q21a_Waste Stream Summary) attached in response to Question 21a.</p>	<p>See Question 21 Attachment Q21a_Waste Stream Summary.pdf</p> <p>Also see all Question 29 Attachments</p>
<p>38. Identify all individuals who currently have and those who have had responsibility for Respondent's environmental matters (e.g. responsibility for the disposal, treatment, storage, recycling, or sale of Respondent's wastes). Also provide each individual's job title, duties, dates performing those duties, supervisors for those duties, current position or the date of the individual's resignation, and the nature of the information possessed by such individuals concerning Respondent's waste management.</p>	<p>See the attached documents for a listing of those responsible for environmental matters 1980 - present. See the attached 1993 and 1997 Job Descriptions for Environmental Services Manager. See the attached document for management structural information 1982-2008. Also see the documents attached in response to Question 6g.</p>	<p>Question 38 Attachments Q38_Res. For Environmental Matters.pdf Q38_Mgr. Env. Svc. Job description – 1993.pdf Q38_Mgr. Env. Svc. Job description – 1997.pdf Q38_HRIS Structure Info. 1982-2008-4.0.pdf</p> <p>Also see all Question 6 Attachments</p>

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<p>39. For each type of waste describe Respondent's contracts, agreements or other arrangements for its disposal, treatment, or recycling.</p>	<p>In general terms, waste and used material was historically either transferred directly to the disposal facility or to one of the PGE waste and used material handling facilities for interim storage. The Harborton Substation operated as a PGE waste and material handling facility between 1995/1996 and 2002. Other historical PGE waste and material handling facilities included Sellwood Substation, PSC, and Wilsonville (only soil/gravel with < 50 ppm PCBs). Currently, the PGE waste and material handling facilities are PSC and Wilsonville (only soil/gravel with < 50 ppm PCBs).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, the available contracts, agreements, or other arrangements for disposal, treatment, or recycling for this specific facility are provided with the documentation attached in response to Question 21 and in Appendix D of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Waste disposal permits are also attached in response to Question 52. Additional available general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7), and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see all Question 21 Attachments</p> <p>Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf</p>
<p>40. Provide copies of such contracts and other documents reflecting such agreements or arrangements, including but not limited to:</p> <p>a. state where Respondent sent each type of its waste for disposal, treatment, or recycling;</p> <p>b. identify all entities and individuals who picked up waste from Respondent or who otherwise transported the waste away from Respondent's operations (these companies and individuals shall be called "Waste Carriers" for purposes of this Information Request);</p> <p>c. if Respondent transported any of its wastes away from its operations, please so indicate;</p> <p>d. for each type of waste specify which Waste Carrier picked it up;</p>	<p>In general terms, waste and used material was historically either transferred directly to the disposal facility or to one of PGE's historical waste and material handling facilities for interim storage prior to disposal. The Harborton Substation operated as a PGE waste and material handling facility between 1995/1996 and 2002. Other historical PGE waste and material handling facilities included Sellwood Substation, PSC, and Wilsonville (only soil/gravel with < 50 ppm PCBs). Currently, in general terms, waste and used materials are either transferred directly to the disposal facility or to one of the following PGE waste and used material handling facilities: PSC or Wilsonville (only soil/gravel with < 50 ppm PCBs).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, those companies/persons with whom PGE currently has arrangements for disposal/recycling/destruction of wastes and/or used material are listed in the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a. The document summarizes the current various waste stream types, the current initial carrier, the current interim storage (if applicable), the current secondary carrier (if applicable), and the current disposal facility. To the best of PGE's knowledge, after reasonable inquiry, all companies/persons with whom PGE has made arrangements for disposal/recycling/destruction of wastes and/or used material for PGE properties in Oregon are listed in the attached document (Q40_Waste-Materials Receivers and Carriers.pdf).</p> <p>The following describes the current waste and used material arrangements at PSC, which would have been similar to the historic waste arrangements at Harborton Substation, Sellwood Substation, and PSC (although it is likely that different contractors/service providers were</p>	<p>Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf</p> <p>Also see Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see all Question 21 Attachments</p> <p>Also see all Question 27 Attachment Q27_Waste-Materials Receivers within IA.pdf</p> <p>Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf</p>

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<p>e. indicate the ultimate disposal/recycling/treatment location for each type of waste.</p> <p>f. provide all documents indicating the ultimate disposal/recycling/treatment location for each type of waste; and</p> <p>g. state the basis for and provide any documents supporting the answer to the previous question.</p>	<p>historically utilized):</p> <ul style="list-style-type: none"> • Earth Protection Services, Inc. (EPSI) recycles the variety of recyclable waste and used materials from the PSC (i.e., ballasts, batteries, and mercury containing articles). New empty containers are exchanged for the filled containers. If there are any concerns about the integrity of the new containers or any other concerns, PGE's Environmental Services (which processes all EPSI invoices) is called to ensure that the vendor promptly corrects the problem. EPSI is a nationally recognized recycling vendor. • Used transformer/insulating oil (< 1 ppm PCBs) is recycled in house by PGE, by Univar USA Inc, or Transformer Technologies. • Univar picks up and transports used transformer/insulating oil (≥ 50 ppm PCBs) to either Clean Harbors Deer Park or to Clean Harbors Aragonite. In addition, Univar picks up and transports used rags and absorbent material (≥ 50 ppm PCBs) to Arlington Landfill. • Oil-filled obsolete transformers and other electrical equipment (< 50 ppm PCBs) are transported to Transformer Technologies. Oil-filled obsolete transformers and other electrical equipment (≥ 50 ppm PCBs) are sent to either Clean Harbors Deer Park or Clean Harbors Argonite for incineration. Oil-filled ballasts (> 1 ppm PCBs) are sent to Arlington Landfill or Clean Harbors Deer Park. • Used rags and absorbent material (1 to 50 ppm PCBs) is picked up by NRC Environmental Services and transported to Columbia Ridge Landfill. • Used transformer/insulating oil (1 to 50 ppm PCBs) is picked up by Transformer Technologies and is incinerated by Transformer Technologies or recycled at Environmental Management of Kansas City. • Non-PCB containing used oil (e.g., hydraulic fluids, compressor oil, and motor oil), used oil filters, and used antifreeze from the maintenance shop are collected in labeled 55-gallon drums and recycled or used for energy recovery by Thermo Fluids. • All parts washers are maintained under license by Safety Kleen which performs monthly service calls. Safety Kleen recycles all used non-hazardous solvents and brake solution, processing the solvent and brake solution for reuse. • Aerosol can drainings are collected in industry standard aerosol can puncturing devices. At PSC, punctured cans are recycled by CalBag Metals Recycling (non-ferrous metal) or Schnitzer Steel (ferrous metal). When the drums are near full, they are sampled by a licensed laboratory to help characterize the waste prior to collection. Other non-PCB-containing scrap metal is also recycled by CalBag Metals 	

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	<p>Recycling (non-ferrous metal) or Schnitzer Steel (ferrous metal).</p> <ul style="list-style-type: none"> Hazardous solvents and paint drainings from aerosol cans are picked up by Veolia Environmental Services and incinerated at Veolia Es Technical Solutions. Non-PCB-containing used equipment parts (e.g., gaskets, hoses, and air filters), auto parts (brake pads, belts, and air filters), and general trash are picked up by waste management and transported to various waste management landfills. Drained obsolete equipment (< 50 ppm PCBs) is recycled by Coleman Metals and drained obsolete equipment (50 to 500 ppm PCBs) is disposed of at Arlington Landfill. <p>Soil and gravel removed during excavations (from upgrades, spill response, or remediation) is tested and disposed of appropriately. The soil and gravel are either transported directly from the site to the disposal facility or are transported to Wilsonville (only soil/gravel with < 50 ppm PCBs) and/or PSC for interim storage before bulk disposal at a location dependant upon PCB-content.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, the available contracts, agreements, or other arrangements for disposal, treatment, or recycling for this specific facility are provided with the waste and materials disposal, treatment, and recycling documentation attached in response to Question 21 and in Appendix D of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Waste disposal permits are also attached in response to Question 52. Also see the response and document attached in response to Question 27. Additional available general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7), and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).</p>	
<p>41. Describe all wastes disposed by Respondent into Respondent's drains including but not limited to:</p> <p>a. the nature and chemical composition of each type of waste;</p> <p>b. the dates on which those wastes were disposed;</p> <p>c. the approximate quantity of those wastes disposed by month and year;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, no wastes were disposed into the historical drains at the Harborton Substation.</p>	

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<p>d. the location to which these wastes drained (e.g. septic system or storage tank at the Property, pre-treatment plant, Publicly Owned Treatment Works (POTW), etc.); and</p> <p>e. whether and what pretreatment was provided.</p>		
<p>42. Identify any sewage authority or treatment works to which Respondent's waste was sent.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, there were no sewage authority or treatment works to which the Harborton Substation waste was sent. Off-site vault water, which was filtered at the Harborton Substation from 1995/1996 to 2002, was discharged to a COP sanitary sewer under permit at PSC. For more information, see the responses to Questions 16 and 21.</p>	
<p>43. Describe all settling tank, septic system, or pretreatment system sludges or other treatment wastes resulting from Respondent's operations.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, there were no settling tanks or septic systems. The only treatment waste produced at the Harborton Substation was filtered off-site vault water (and any resulting separated oil), used granular activated carbon, and paper filters from the filter process. For more information, see the response to Questions 16 and 21.</p>	
<p>44. If applicable, describe the facilities, processes and methods Respondent or Respondent's contractor used, and activities engaged in, either currently or in the past, related to ship building, retrofitting, maintenance or repair, including, but not limited to, dry-docking operations, tank cleaning, painting and re-powering.</p>	<p>Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not engage in ship building, retrofitting, maintenance, or repair activities at Harborton Substation.</p>	
<p>45. Describe any hazardous substances, wastes, or materials used or generated by the activities described in response to the previous Question and how these hazardous substances, materials and wastes were released or disposed of.</p>	<p>Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not engage in ship building, retrofitting, maintenance, or repair activities at Harborton Substation.</p>	

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46. Provide copies of any records you have in your possession, custody or control relative to the activities described in response to the previous two Questions.	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, PGE did not engage in ship building, retrofitting, maintenance, or repair activities at Harborton Substation.	
47. Describe any process or activity conducted on a Property identified in response to Question 4 involving the acquisition, manufacture, use, storage, handling, disposal or release or threatened release of polychlorinated biphenyl(s), "PCB(s)" or PCB(s)-containing materials or liquids.	<p>Activities and processes involving the acquisition, manufacture, use, storage, handling, disposal or release of PCBs at Harborton Substation (Parcel A) included:</p> <ul style="list-style-type: none"> • 1973 to 1980 – Gas turbine electrical equipment maintenance • 1973 to present – Substation and switchyard electrical equipment (e.g., transformers, capacitors, bushings) operation, routine maintenance, and generation of obsolete equipment • 1988 to present – New and/or surplus (used) electrical equipment storage (< 500 ppm PCBs) in the east equipment yard • 1992 to present – New and/or surplus (used) electrical equipment storage (< 500 ppm PCBs) in the west equipment yard • 1995/1996 to 2002 - Waste and material handling facility activities, including the temporary storage, consolidation, management, and packaging of onsite and off-site PCB-containing electrical equipment, drained electrical equipment oil, and spill response excavated soil and clean up material in the maintenance building prior to off-site disposal, as well as treatment (filtration) of offsite vault water adjacent to the maintenance building • 1988 to present – Spill response and clean up, as needed. <p>For further details, see the response and documents to Questions 5g, 13k, 15, 16, 21, 48, 62, and 68. Also see the documents provided in response to Question 29 for a schematic of site operations and activities.</p>	<p>See all Question 15 Attachments</p> <p>Also see all Question 21 Attachments</p> <p>Also see all Question 29 Attachments</p> <p>Also see all Question 62 Attachments</p>
48. For each process or activity identified in response to the previous Question, describe the dates and duration of the activity or process and the quantity and type of PCB(s) or PCB(s) containing materials or liquids.		
<div>a. the manufacturer and serial number of each transformer;</div> <div>b. the quantity of oil in each transformer;</div> <div>c. the concentrations of PCB</div>	<p><u>Gas Turbine Maintenance</u></p> <p>The gas turbines at the Generating Plant operated from 1973 to 1980. There may have been oil-filled electrical equipment associated with these operations, which may have been contaminated with PCB's during routine maintenance (e.g., lubricating oil). To the best of PGE's knowledge, after reasonable inquiry, PGE does not know the manufacturer, serial number, quantity of oil, and concentrations of PCBs, if any, of any oil-filled equipment that may</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see all Question 21 Attachments</p> <p>Also see Question 62 Attachments</p>

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<p>e. details about how each transformer was handled or stored or otherwise processed;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, between 1988 and 2007, there have been 14 spills/releases at the Harborton Substation associated with the known releases or potential releases of PCB-containing oil. These spills/releases were cleaned up and excavated soil and/or cleanup materials were properly disposed of. For further details, see the response and documents attached for Question 68.</p> <p><u>Gas Turbine Maintenance</u> Equipment was handled by trained qualified PGE personnel.</p> <p><u>Substation and Switchyard Equipment Operation and Routine Maintenance</u> Equipment is handled by trained qualified PGE personnel. Equipment located in the switchyard and distribution substation is energized and in service.</p> <p><u>Equipment Storage</u> New and/or surplus equipment is/was stored in the east and west equipment storage yards. Equipment is placed there by trained and qualified PGE personnel.</p> <p><u>Waste and Material Handling Facility</u> PCB-containing equipment, drained oil, and spill response excavated soil and cleanup materials were handled by trained and qualified PGE personnel.</p> <p><u>Spill Response and Clean Up</u> During spill response, leaking equipment was repaired, when possible, or removed and replaced, as necessary. Repairs, soil excavation, and cleanup waste handling was/is performed by trained and qualified PGE personnel.</p> <p>Obsolete equipment is drained prior to disposal/recycling, if possible. Drained oil is incinerated or recycled, depending on its PCB content. Obsolete equipment may be transferred to a PGE waste and used materials handling facility for interim storage prior to disposal/recycling. The obsolete equipment is incinerated, landfill disposed, or recycled based on PCB content and structural composition. See the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a.</p> <p>Some used, but not obsolete, transformers have been sold to other companies/persons. These are documented in Supplemental Submittal S7 (documentation from facilities that may have received waste and materials from properties within the Investigation Area).</p> <p>For further information, see the response to Questions 16, 21, 27, and 40.</p>	<p>See Question 21 Attachment Q21a_Waste Stream Summary.pdf</p>
<p>f. information describing the contractual relationship Respondent had, if any, with owners or users of the respective transformers, including but not limited to, liability for disposal;</p>	<p>Not applicable. Equipment is owned by PGE.</p>	

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g. information on any other oil filled electrical equipment at the Property, and;	From 1973 to 1985, the ASTs contained distillate fuel (diesel #2). For further details, see the response to Question 16.	
h. complete copies of any contracts, invoices, receipts, or other documents related to the transformers or other oil filled electrical equipment to the Property.	<p>To the best of PGE's knowledge, after reasonable inquiry, the available contracts, agreements, or other arrangements for disposal, treatment, or recycling for this specific facility are provided with the waste and materials disposal, treatment, and recycling documentation attached in response to Question 21, as well as in Appendix D of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Waste disposal permits are also attached in response to Question 52.</p> <p>Additional available general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling are provided in the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7) and the supplemental submittal of general PGE contracts, agreements, or other arrangements for disposal, treatment, or recycling (Supplemental Submittal S6).</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see all Question 21 Attachments</p> <p>Also see Question 52 Attachments Q52_01.pdf Q52_02.pdf</p>
49. For each process or activity identified in response to the previous two Questions, identify the location of the process or activity on the Property.	The east equipment storage yard (and former location of the generating plant), west equipment storage yard, the distribution substation, the switchyard, and the maintenance building are depicted on Figure 1 in the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. To the best of PGE's knowledge, after reasonable inquiry, PGE does not have a figure depicting the location of known or potential spills/releases of PCB-containing oil.	See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf
Section 5.0 - Regulatory Information		
50. Identify all federal, state and local authorities that regulated the owner or operator of each Property and/or that interacted with the owner or operator of each Property. Your response is to address all interactions and in particular all contacts from agencies/departments that dealt with health and safety issues and/or environmental concerns.	<p>The primary federal, state and local agencies that have regulated PGE at the Harborton Substation (Parcel A) and Parcel B include:</p> <ul style="list-style-type: none"> • COP (including fire, medical, police, and the mayor's office): building safety inspections, facility enhancements, building demolitions/constructions, notification of spills, air permit • Oregon Department of Environmental Quality (DEQ): spills, product/waste disposal, facility enhancements, air permits, remedial investigation • U.S. Coast Guard (USCG): spills • U.S. Environmental Protection Agency (USEPA): for Portland Harbor Superfund Site, Emergency Planning & Community Right-to-Know Act (EPCRA), TSCA • Federal Energy Regulatory Commission (FERC): regulatory oversight of the substation and the historical power generation plant • Oregon Department of Energy (ODOE): regulatory oversight of the historical power generation plant • Columbia-Willamette Air Pollution Authority (CWAPA): air permits • Oregon Public Utility Commission (OPUC): regulatory oversight of the historical power generation plant, air permits • Securities and Exchange Commission: Turbine leases • DSL: Leased aquatic lands • US Army Corp of Engineers (USACE): wetlands 	<p>Question 50 Attachments</p> <p>Q50_1973 Goldschmidt_Stop Work Order.pdf Q50_1973 Certificate Public Utility.pdf Q50_Limitations on Harborton Operation.pdf Q50_PUC Study 1977.pdf Q50_Special Report_The Harborton Issue 1977.pdf Q50_1972-1976 - PGE & Agency Correspondences.pdf Q50_1979 DEQ on Harborton Turbines.pdf Q50_1980-1986 - PGE & Agency Correspondences.pdf Q50_First Notice of Land Review Request.pdf Q50_1993-1999 - PGE & Agency Correspondences.pdf Q50_2000 PGE Voluntary Agreement with DEQ.pdf Q50_2000-03-00 Key changes to Vol Agreement.pdf Q50_2000-2006 - PGE & Agency Correspondences.pdf Q50_2002-04-19 PGE Doc. Sub. to US EPA.pdf Q50_DEQ ECSI Report 2009.pdf Q50_1975 EQC Authorization for Public Hearing.pdf Q50_1979 Air Quality Impact DEQ Memo.pdf Q50_Air Quality Impact.pdf Q50_DEQ Brief No 1.pdf</p>

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	<p>The primary federal, state and local agencies that may have regulated PGE at Parcels C through H include:</p> <ul style="list-style-type: none"> • USEPA: for Portland Harbor Superfund Site • FERC: regulatory oversight of the transmission lines <p>Regarding health and safety concerns, interaction with the following agencies would occur as a result of a compliance inspection, a consultation visit or during the course of an accident investigation (contact with the OPUC would occur if an accident of a certain severity occurred at a site):</p> <ul style="list-style-type: none"> • Federal Occupational Safety and Health Administration (OSHA) • Oregon Occupational Safety and Health Administration (OrOSHA) • OPUC • Oregon Department of Transportation (ODOT) • ODOE <p>Please see the attached documents for the contacts, correspondence, and reports between PGE and public agencies. Also see the reports and documents attached in response to Question 15, which were also sent to public agencies.</p>	<p>Q50_DEQ Brief No.3.pdf Q50_Opening Brief DEQ New Source Issue.pdf Q50_PGE Brief No 2, Answering Brief.pdf Q50_PGE Brief No 3.pdf Q50_Respondents Brief.pdf</p> <p>Also see Question 15 Attachments Q15_1973 PGE Environmental Report.pdf Q15_Addendum to 1973 PGE Environmental Report.pdf Q15_1999-07-26 DEQ Site Assess Recomm.pdf Q15_1999 Response to DEQ Strat.pdf Q15_Addendum to 1999 Response to DEQ Strat.pdf Q15_2001-02-21 Draft Work Plan Addendum.pdf Q15_2001-09-05 Data Package No 2.pdf Q15_2001-09-27 Silt Contour Map.pdf Q15_2002-03-28 MW-2 Sampling Results.pdf Q15_Bridgewater-HAI 2000 Pre-RI SAP.pdf Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf Q15_Bridgewater-HAI 2001 Phase I and II.pdf Q15_Bridgewater-HAI 2001 Pre-RI WP Ad1.pdf Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_Odell 1976 Air Quality Report.pdf Q15_2000-10-11_DEQ Split Sample.pdf</p>
<p>51. Describe all occurrences associated with violations, citations, deficiencies. and/or accidents concerning each Property during the period being investigated related to health and safety issues and/or environmental concerns. Provide copies of all documents associated with each occurrence described.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE has not had any environmental related violations/citations/deficiencies for the Harborton Substation. For spills/discharges, please see the response to Question 62.</p> <p>PGE maintains records of all OSHA accidents and injuries; however, the records are not categorized or searchable by property. To the best of PGE's knowledge, after reasonable inquiry, there have been three health and safety related violations/citations/deficiencies or accidents for the Harborton Substation. These are as follows:</p> <ul style="list-style-type: none"> • On July 24, 1979, PGE received citation (No. H9399-077-79) for worker accident at Harborton Substation involving a belt drive. Initially categorized as "serious", this citation was reduced to "First Instance General Violation." See the attached documents (Q51_1979-07-31 PGE Letter to Workers Comp.pdf and Q51_1980-01-17 PGE Attorney Letter to PGE.pdf). • On October 29, 1982, PGE received a citation (No. H1069-001-83) which alleged the company was in violation for a faulty yellow warning light located on the cab of a pick-up truck and for a safety belt; see the attached document (Q51_1982-11-15 PGE Letter to Workers Comp.pdf). However, PGE argued that the yellow light was not a 	<p>Question 51 Attachments Q51_1979-07-31 PGE Letter to Workers Comp.pdf Q51_1980-01-17 PGE Attorney Letter to PGE.pdf Q51_1982-11-15 PGE Letter to Workers Comp.pdf Q51_1987-06-10 Wit Acct of Asbestos.pdf Q51_1987-06-11 Violation Worksheet.pdf Q51_1987-08-17 PGE to Workers Comp.pdf Q51_1987-10-13 PGE Letter to Workers Comp.pdf Q51_1987-10-20 Workers Comp Letter to PGE.pdf Q51_1987-10-30 Notes on Asbestos discovery.pdf Q51_1987-12-02 State of Oregon Letter to PGE.pdf Q51_1987-12-04 PGE Letter to Workers Comp.pdf Q51_1987 Accident Prevention Mtg Notes.pdf Q51_1987 Appeal Withdrawl, unsigned.pdf Q51_1987 Certification of Posting.pdf Q51_1988-02-18 DOJ Letter to Workers Comp.pdf Q51_1988-03-15 PGE Letter to Workmans Comp.pdf Q51_1988-10-24 Motion to Withdraw Citation.pdf</p>

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	<p>required piece of equipment for the truck and that the safety belt was grandfathered in (installed prior to the enactment of the regulations); therefore, the violation should be withdrawn.</p> <ul style="list-style-type: none"> On June 11, 1987, PGE received a citation (No. S8899-094-87) for exposing a demolition contractor's employee to 98% chrysotile asbestos. The asbestos was in material used for noise damping. Workers were removing strips of noise damping material from between metal plates to scrap the metal. The asbestos was eventually removed via wet method by an asbestos worker, double bagged, and sent to Circle C Landfill. Following an investigation and appeal, the citation was eventually withdrawn. See the attached documents (Q51_1987-06-10 Wit Acct of Asbestos.pdf, Q51_1987-06-11 Violation Worksheet.pdf, Q51_1987-08-17 PGE to Workers Comp.pdf, Q51_1987-10-13 PGE Letter to Workers Comp.pdf, Q51_1987-10-20 Workers Comp Letter to PGE.pdf, Q51_1987-10-30 Notes on Asbestos Discovery.pdf, Q51_1987-12-02 State of Oregon Letter to PGE.pdf, Q51_1987-12-04 PGE Letter to Workers Comp.pdf, Q51_1987 Accident Prevention Mtg Notes.pdf, Q51_1987 Appeal Withdrawl, unsigned.pdf, Q51_1987 Certification of Posting.pdf, Q51_1988-02-18 DOJ Letter to Workers Comp.pdf, Q51_1988-03-15 PGE Letter to Workmans Comp.pdf, Q51_1988-10-24 Motion to Withdrawl Citation.pdf). 	
<p>52. Provide a list of all local, state and federal environmental permits ever issued to the owner or operator on each Property (e.g., RCRA permits. NPDES permits, etc.). Please provide a copy of each federal and state permit, and the applications for each permit, ever issued to the owner or operator on each Property.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, Harborton Substation currently has no environmental permits.</p> <p>In prior years, the following environmental permits have been requested and/or issued for the Harborton Substation:</p> <ul style="list-style-type: none"> PGE obtained air discharge permits for the operation for the operation of the gas turbines (1973 to 1980); see the attached documents (Q52_1973 Air Contaminant Discharge Permit Exp 1974.pdf, Q52_1973 Air Contaminant Discharge Permit Exp1975.pdf, Q52_1973 Application for Air Contam Discharge Permit.pdf, Q52_1973 DEQ Air Contaminant Discharge Permit.pdf, Q52_1975 DEQ Air Contaminant Discharge Permit.pdf, Q52_1979 Air Contaminant Discharge Permit.pdf, Q52_1979 DEQ Air Contaminant Discharge Permit.pdf, Q52_1979 DEQ to PGE_Special Discharge Permit.pdf, and Q52_1979 DEQ Special Operations Permit.pdf). In 1983, PGE obtained a special permit for the operational testing of the gas turbines; see the attached document (Q52_1983 DEQ Special Letter Permit.pdf) PGE completed a Joint Permit Application (JPA) for the removal of contaminated soil in a wetland at the Harborton Substation in 2001. The JPA was submitted to the USACE and DSL, but the USACE and DSL determined that a permit was unnecessary for this work; see the attached document (Q52_2001-08-24 JPA.pdf), as well as Figure 23 (location #11) and Appendix C of the Pre-RI Report (Q15_Bridgewater-HAI 	<p>Question 52 Attachments Q52_01.pdf Q52_02.pdf Q52_NonHaz Permits for Poles.pdf</p> <p><u>Air Permits</u> Q52_1973 Air Contaminant Discharge Permit Exp 1974.pdf Q52_1973 Air Contaminant Discharge Permit Exp 1975.pdf Q52_1973 Application for Air Contam Discharge Permit.pdf Q52_1973 DEQ Air Contaminant Discharge Permit.pdf Q52_1975 DEQ Air Contaminant Discharge Permit.pdf Q52_1979 Air Contaminant Discharge Permit.pdf Q52_1979 DEQ Air Contaminant Discharge Permit.pdf Q52_1979 DEQ to PGE_Special Discharge Permit.pdf Q52_1979 DEQ Special Operations Permit.pdf Q52_1983 DEQ Special Letter Permit.pdf</p> <p><u>Other Permits</u> Q52_1971 Notice of Construction_Gas Turbine.pdf Q52_1973 Air Pollution Authority Notice of</p>

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	<p>2002 Pre-RI Report.pdf) attached in response to Question 15.</p> <ul style="list-style-type: none"> PGE obtained conditional use and building permits/authorization for the development of the Harborton Substation; see the attached documents (Q52_1971 Notice of Construction_Gas Turbine.pdf, Q52_1973 Air Pollution Authority Notice of Construction.pdf, Q52_1973 Construction Approval.pdf, Q52_ConditionalUseChronology.pdf, and Q52_ConditionalUsePermitLayout.pdf). Between 1996 and 2000, PGE requested batch discharge permits from the COP to discharge vault water that had been treated at the Harborton Substation into the City's sanitary sewer system at PSC; see the document (Q21a_1996-2002 Batch Dis. Request.pdf) attached in response to Question 21a. <p>Correspondence related to environmental permits is provided in response to Question 50.</p> <p>Non-environmental permits have been issued for the Harborton Property. To the best of PGE's knowledge, after reasonable inquiry, these have included:</p> <ul style="list-style-type: none"> Non-hazardous waste permits for disposal of petroleum contaminated soil at the Hillsboro Landfill; see Appendix D of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15 and the document (Q21a_NonHaz WAL_Docs.pdf) attached in response to Question 21a. The attached documents (Q52_01.pdf and Q52_02.pdf) are general PGE disposal permits, for which specific contributions from substations are not indicated. A component of the waste disposed under these permits may have originated from the Harborton Substation. The attached document (Q52_NonHaz Permits for Poles.pdf) is the current non-hazardous waste permit for the disposal of used power poles at the Hillsboro Landfill. Fire marshal permits; see the attached document (Q52_1992 Fire Marshall Permits.pdf). Fill permits; see the attached documents (Q52_1986 COP Greenway Permitfill.pdf, Q52_1986 OSHD Fill Permit.pdf, and Q52_Winter of 1971 & 1972_2nd Dredging and Fill Documents.pdf). 	<p>Construction.pdf Q52_1973 Construction Approval.pdf Q52_ConditionalUseChronology.pdf Q52_ConditionalUsePermitLayout.pdf Q52_2001-08-24 JPA.pdf Q52_1992 Fire Marshall Permits.pdf Q52_1986 COP Greenway Permitfill.pdf Q52_1986 OSHD Fill Permit.pdf Q52_Winter of 1971 & 1972_2nd Dredging and Fill Documents.pdf</p> <p>Also see Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see Question 21 Attachments Q21a_1996-2002 Batch Dis. Request.pdf Q21a_NonHaz WAL_Docs.pdf</p> <p>Also see all Question 50 Attachments</p>
53. Did the owner or operator ever file a Hazardous Waste Activity Notification under the RCRA? If so, provide a copy of such notification.	To the best of PGE's knowledge, after reasonable inquiry, PGE has not filed a Hazardous Waste Activity Notification under RCRA for the Harborton Substation.	
54. Did the owner or operator's facility on each Property ever have "interim status" under the RCRA? If so, and the facility	Not applicable. To the best of PGE's knowledge, after reasonable inquiry, the Harborton Substation has not had "interim status" under RCRA.	

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does not currently have interim status; describe the circumstances under which the facility lost interim status.		
55. Provide all RCRA Identification Numbers issued to Respondent by EPA or a state for Respondent's operations.	<p>Not applicable. To the best of PGE's knowledge, after reasonable inquiry, no RCRA Identification Number has been issued for the Harborton Substation.</p> <p>The EPA ID ORD980665376, listed on the hazardous waste manifests (Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf) attached in response to Question 21a, corresponds to the PSC, a PGE waste and material handling facility.</p>	<p>See Question 21a Attachment Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf</p>
56. Identify all federal offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.	<p>From 1996/1997 to 2002, the Harborton Substation was identified to the EPA as a TSCA Storage for Disposal Facility. To the best of PGE's knowledge, after reasonable inquiry, the EPA (under TSCA) is the only federal office to which PGE has sent or filed hazardous substance or hazardous waste information from the Harborton Substation.</p> <p>Toxic materials (e.g., asbestos and PCB-containing) generated and/or managed at the Harborton Substation were either sent directly to the disposal facility or were disposed of after interim storage at a PGE waste and material handling facility (e.g., the PSC). See the documents (Q21a_1987-2002 Bills of Lading.pdf and Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf) attached in response to Question 21a and the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7). Please note, the EPA ID ORD980665376, listed on the hazardous waste manifests (Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf) attached in response to Question 21a, corresponds to the PSC.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, PGE likely supplied a courtesy copy of the 2002 Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf), which is attached in response to Question 15, to the EPA. The 2002 Pre-RI Report includes a description of PCB spills and PCB waste and material handling activities at the Harborton Substation.</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see Question 21 Attachment Q21a_1987-2002 Bills of Lading.pdf Q21a_Haz Waste Manifests_Harborton_1992-2003.pdf</p>
57. Identify all state offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE has sent or filed hazardous substance or hazardous waste information from the Harborton Substation to the Oregon DEQ.</p> <p>As part of the Voluntary Cleanup Pathway Program, PGE provided the Oregon DEQ a copy of the 2002 Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf), which is attached in response to Question 15. The 2002 Pre-RI Report includes a description of PCB spills and PCB waste and material handling activities at the Harborton Substation.</p> <p>Also see the supplemental submittal of documentation from other PGE facilities that may have received waste and materials from the Harborton Substation (Supplemental Submittal S7).</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p>

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<p>58. List all federal and state environmental laws and regulations under which the Respondent has reported to federal or state governments, including but not limited to: Toxic Substances Control Act, 15 U.S.C. Sections 2601 et seq., (TSCA); Emergency Planning and Community Right-to-Know Act, 42 U.S.C. Sections 1101 et seq., (EPCRA); and the Clean Water Act (the Water Pollution Prevention and Control Act), 33 U.S.C. Sections 1251 et seq., Oregon Hazardous Substance Remedial Action Law, ORS 465.315, Oregon Water Quality law, ORS Chapter 468(b), Oregon Hazardous Waste and Hazardous Materials law, ORS Chapters 465 and 466, or Oregon Solid Waste law, ORS Chapter 459. Provide copies of each report made, or if only oral reporting was required, identify the federal and state offices to which such report was made.</p>	<p>PGE has reported to federal and state governments under the following federal and state environmental laws and regulations for wastes from the Harborton Substation: TSCA, EPCRA, Clean Air Act, Oregon Hazardous Substance Remedial Action Law, Oregon Hazardous Waste and Hazardous Materials Law, Oregon Solid Waste Law, the Oregon Cleanup Law, and the state fire code.</p> <p>See the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15, the documents attached in response to Question 21 and the documents attached in response to Question 50.</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see all Question 21 Attachments</p> <p>Also see all Question 50 Attachments</p>
<p>59. Provide a copy of any registrations, notifications, inspections or reports required by the Toxic Substances Control Act, 15 USC § 2601 et seq., or state law, to be maintained or submitted to any government agency, including fire marshal(s), relating to PCB(s) or PCB(s) containing materials or liquids on any Property identified in response to Question 4.</p>	<p>Annual PCB reports (1978-2008) for PGE (all PGE sites combined) are maintained in compliance with record-reporting rule 40 CFR 761 and are provided in a supplemental submittal (Supplemental Submittal S3).</p>	
<p>60. Has Respondent or Respondent's</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, there have been no contacts to DSL or any other state agency in regards to an incident, accident, spill, release, or other event</p>	<p>See Question7 Attachments Q07_1976-1986 DSL Aquatic Lands Lease.pdf</p>

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<p>contractors, lessees, tenants, or agents ever contacted, provided notice to, or made a report to the Oregon Department of State Lands ("DSL") or any other state agency concerning an incident, accident, spill, release, or other event involving Respondent's leased state aquatic lands? If so, describe each incident, accident, spill, release, or other event and provide copies of all communications between Respondent or its agents and DSL or the other state agency and all documents that were exchanged between Respondent, its agents and DSL or other state agency.</p>	<p>involving the leased aquatic lands adjacent to the Harborton Substation.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, correspondence with DSL has been limited to:</p> <ul style="list-style-type: none"> • Aquatic land leases; see the leases (Q07_1976-1986 DSL Aquatic Lands Lease.pdf, Q07_1986-1996 DSL Aquatic Lands Lease.pdf, and Q07_1996-2015 DSL Aquatic Lands Lease.pdf) attached in response to Question 7; and • A JPA for the limited excavation work conducted in the wetlands at the Harborton Substation, which was determined not be necessary by the USACE and DSL; see the document (Q52_2001-08-24 JPA.pdf) attached in response to Question 52, as well as Figure 23 (location #11) and Appendix C of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. 	<p>Q07_1986-1996 DSL Aquatic Lands Lease.pdf Q07_1996-2015 DSL Aquatic Lands Lease.pdf</p> <p>Also see all Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see Question 52 Attachment Q52_2001-08-24 JPA.pdf</p>
<p>61. Describe all notice or reporting requirements to DSL that you had under an aquatic lands lease or state law or regulation regarding incidents affecting, or activities or operations occurring on leased aquatic lands. Include the nature of the matter required to be reported and the office or official to whom the notice or report went to. Provide copies of all such notices or reports.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, PGE has not sent notices or reports to DSL regarding incidents, activities, or operations on the leased aquatic lands.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, correspondence with DSL has been limited to:</p> <ul style="list-style-type: none"> • Aquatic land leases; see the leases (Q07_1976-1986 DSL Aquatic Lands Lease.pdf, Q07_1986-1996 DSL Aquatic Lands Lease.pdf, and Q07_1996-2015 DSL Aquatic Lands Lease.pdf) attached in response to Question 7; and • A JPA for the limited excavation work conducted in the wetlands at the Harborton Substation, which was determined not be necessary by the USACE and DSL; see the document (Q52_2001-08-24 JPA.pdf) attached in response to Question 52, as well as Figure 23 (location #11) and Appendix C of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. 	<p>See Question7 Attachments Q07_1976-1986 DSL Aquatic Lands Lease.pdf Q07_1986-1996 DSL Aquatic Lands Lease.pdf Q07_1996-2015 DSL Aquatic Lands Lease.pdf</p> <p>Also see all Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see Question 52 Attachment Q52_2001-08-24 JPA.pdf</p>
<p>Section 6.0 - Releases and Remediation</p>		
<p>62. Identify all leaks, spills, or releases into the environment of any waste, including petroleum, hazardous substances, pollutants, or contaminants, that have occurred at or from each Property, which includes any aquatic</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, an incident on 30 May 1986, originally reported as a spill was actually the result of natural processes. On 30 May 1986, an oil sheen was discovered in a low area (wetland) of standing water near the stormwater fuel transfer station drain outlet; see the attached document (Q62_1986-05-30_Spill Report.pdf). A sheen was not observed on the stormwater prior to discharge. PGE inspected the entire swale from the drain outlet to the Willamette River and found that the sheen was localized. Analysis of the water was non-detect for PCBs. PGE concluded that the sheen was likely due to decaying</p>	<p>Question 62 Attachments Q62_1986-05-30_Spill Report.pdf Q62_1988-05-20_Spill Report.pdf Q62_1994-03-17_Spill Report.pdf Q62_1994-08-25_Spill Report.pdf Q62_1995-02-09_Spill Report.pdf Q62_1997-02-24_Spill Report.pdf</p>

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lands owned or leased by Respondent. In addition, identify and provide copies of any documents regarding:	vegetation in the swale and was not the result of an oil spill/release; see page 9 of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15 and Appendix A of the document (Q15_1999 Response to DEQ Strat.pdf) attached in response to Question 15.	
a. when such releases occurred;		
b. how the releases occurred (e.g. when the substances were being stored, delivered by a vendor, transported or transferred (to or from any tanks, drums, barrels, or recovery units), and treated);	To the best of PGE's knowledge, after reasonable inquiry, the attached documents provide information describing the known leaks, spills, or releases to the environment at the Harborton Substation (Parcel A). Also see the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. To the best of PGE's knowledge, after reasonable inquiry, no waste, materials, or process residues have leaked, spilled, or been released to the Willamette River from the Harborton Substation. The following addresses the specific releases and spills that have occurred at the Harborton Substation.	
c. the amount of each hazardous substances, pollutants, or contaminants so released;	<ul style="list-style-type: none"> May 20, 1988 — An oil filter truck spilled 20 gallons of PCB-containing (40 ppm) transformer oil onto the soil/gravel inside the Harborton Substation; see the attached document (Q62_1988-05-20_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil- and PCB-containing soil/gravel and absorbent generated during the cleanup were likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. 	<p>Q62_1997-07-25_Spill Report.pdf Q62_1997-12-04_Spill Report.pdf Q62_1997-12-05_Spill Report.pdf Q62_2000-08-07_Spill Report.pdf Q62_2000-11-14_Spill Report.pdf Q62_2001-04-27_Spill Report.pdf Q62_2002-03-19_Spill Report.pdf Q62_2002-04-02_Spill Reports.pdf Q62_2004-11-01_Spill Report.pdf Q62_2006-09-21_Spill Report.pdf Q62_2007-04-11_Spill Report.pdf Q62_2007-10-29_Spill Report.pdf Q62_2000-02-04 Email about a Dec 1997 spill.pdf</p>
d. where such releases occurred;		
e. any and all activities undertaken in response to each such release or threatened release, including the notification of any agencies or governmental units about the release;	<ul style="list-style-type: none"> March 17, 1994 – A breaker spilled 10 to 15 gallons of PCB-containing (51 ppm) oil onto gravel at the Harborton Substation; see the attached document (Q62_1994-03-17_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21, the PCB- and oil-contaminated soil/gravel generated during the cleanup was likely transported and disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility. 	
f. any and all investigations of the circumstances, nature, extent or location of each release or threatened release including, the results of any soil, water (ground and surface), or air testing undertaken;	<ul style="list-style-type: none"> August 25, 1994 — Oil spilled near AST #2 across an area of 38 feet by 26 feet; see the attached maintenance request form (Q62_1994-08-25_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel generated during the cleanup was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. 	<p>Also see Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_1999 Response to DEQ Strat.pdf</p>
g. all persons with information relating to these releases; and		<p>Also see all Question 21 Attachment Q21a_Waste Stream Summary.pdf</p>
h. list all local, state, or federal departments or agencies notified of the release, if applicable;	<ul style="list-style-type: none"> February 9, 1995 — A bushing spilled 5 gallons of oil onto the soil at the Harborton 	

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	<p>Substation; see the attached document (Q62_1995-02-09_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. The oil was analyzed; however, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer has knowledge of the PCB-content of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> February 24, 1997 — A 1500 kVA transformer spilled approximately 20 gallons of PCB-containing (19 ppm) oil onto soil and gravel at the Harborton Substation during an attempted break-in and bushing theft; see the attached document (Q62_1997-02-24_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. July 25, 1997 — A breaker spilled 3 gallons of PCB-containing (<5 ppm) oil onto the soil/gravel at the Harborton Substation; see the attached document (Q62_1997-07-25_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. December 4, 1997 — An above ground oil tank associated with a non-functioning submerged cable was vandalized, resulting in a release of approximately 40 gallons of cable oil (liquid) onto the soil (solid) near the southern boundary of Parcel A; see the attached document (Q62_1997-12-04_Spill Report.pdf). The following day, a second spill report was completed suggesting a second spill occurred in the same area; see the attached document (Q62_1997-12-05_Spill Report.pdf). However, it was later determined that the oil observed on 5 December 1997 was from the spill that had occurred the previous day; see the attached document (Q62_2000-02-04 Email about a Dec 1997 spill.pdf). The spill was located under the BPA transmission tower near the southern boundary of Parcel A, approximately 200 feet from the Willamette River. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated 	

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	<p>soil/gravel). PGE later removed the entire structure including the oil reservoir; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Although the oil was analyzed, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer knows the exact PCB-content, if any, of the spilled oil; however, it was classified as non-PCB (< 50 ppm). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, any remaining oil in the reservoir would likely have been drained and either recycled (in house or by Environmental Management) or incinerated (by Transformer Technologies); the equipment would most likely have been scrapped at Coleman Metals; and the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> • August 7, 2000 — A spare breaker bushing spilled approximately 2 gallons of transformer oil onto soil; see the attached document (Q62_2000-08-07_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic yard of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • November 14, 2000 — A 16.8 mVA transformer spilled approximately 2 gallons of PCB-containing (3 ppm) oil onto soil and concrete; see the attached document (Q62_2000-11-14_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 2.5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • April 27, 2001 — A transformer spilled approximately 10 gallons of PCB-containing (21 ppm) oil onto a Wilhelm truck and trailer, as well as the surrounding soil/gravel; see the attached document (Q62_2001-04-27_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including washing of the vehicle and the removal of contaminated wash water and soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely 	

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	<p>disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. To the best of PGE's knowledge, after reasonable inquiry, the wash water was either solidified and disposed of with the contaminated soil/gravel or may have been treated like vault water for disposal purposes.</p> <ul style="list-style-type: none"> 2001 – During the Harborton Substation Pre-RI, PGE assessed the nature and extent of soil and groundwater contamination associated with site activities/operations and past spills/release at the Harborton Substation. The Pre-RI identified several areas within the Harborton Substation with petroleum hydrocarbon-impacted soil, at which PGE elected to complete limited source removal actions (excavation and off-site disposal). A total of 11.08 tons of soil were excavated from five small areas in August 2001 and disposed of at the Hillsboro Landfill; see Appendix D of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. These areas targeted soils with total petroleum hydrocarbon concentrations greater than 1,000 ppm and were located near the rail car unloading area, in the switchyard, adjacent to the fuel transfer station, next to AST #2, and at the cable crossing location near the southern boundary of Parcel A. These areas are depicted in Figure 23 of the Pre-RI Report. March 19, 2002 — A 69 kVA transformer spilled approximately 0.5 gallon of PCB-containing (41 ppm) oil onto soil and gravel within the substation; see the attached document (Q62_2002-03-19_Spill Report.pdf). Laboratory analysis indicated that the oil had a PCB concentration of 41 ppm. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. April 2, 2002 — A transformer spilled approximately 0.5 cup of PCB-containing (56 ppm) oil onto the gravel within the Harborton Substation; see the attached document (Q62_2002-04-02_Spill Reports.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility. April 2, 2002 — A transformer spilled approximately 1 cup of PCB-containing (23 ppm) oil onto the gravel within the Harborton Substation; see the attached document (Q62_2002-04-02_Spill Reports.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the 	

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	<p>removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> • November 1, 2004 — A transformer capacitor spilled an unknown quantity of oil onto the asphalt within the Harborton Substation; see the attached document (Q62_2004-11-01_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated absorbent). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated absorbent was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • September 21, 2006 — A Wilhelm truck spilled 10 gallons of hydraulic oil onto the gravel in the rear storage area of Harborton Substation; see the attached document (Q62_2006-09-21_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 0.5 yards of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • April 11, 2007 — A contractor boom truck spilled 22 gallons of hydraulic oil onto soil and gravel within the Harborton Substation Pole Yard; see the attached document (Q62_2007-04-11_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 10 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • October 29, 2007 — Vandals trying to remove a bushing caused a 750 kVA transformer to spill approximately 10 gallons of PCB-containing (5 ppm) transformer oil onto the soil and gravel within the Harborton Substation; see the attached document (Q62_2007-10-29_Spill Report.pdf). The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste 	

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	Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.	
<p>63. Was there ever a spill, leak, release or discharge of waste, including petroleum, or hazardous substances, pollutant or contaminant into any subsurface disposal system or floor drain inside or under a building on the Property? If the answer to the preceding question is anything but an unqualified "no", identify:</p> <p>a. where the disposal system or floor drains were located;</p> <p>b. when the disposal system or floor drains were installed;</p> <p>c. whether the disposal system or floor drains were connected to pipes;</p> <p>d. where such pipes were located and emptied;</p> <p>e. when such pipes were installed;</p> <p>f. how and when such pipes were replaced, or repaired; and</p> <p>g. whether such pipes ever leaked or in any way released such waste or hazardous substances into the environment.</p>	<p>There were floor drains in the switchyard control house and maintenance building at the Harborton Substation. The drains in the maintenance building were cemented over prior to PCB-waste handling activities beginning in 1995/1996. To the best of PGE's knowledge, after reasonable inquiry, these drains were not connected to any sewer lines. To the best of PGE's knowledge, after reasonable inquiry, PGE does not know where these drains would have discharged. For further details, see the response to Questions 16 and 18.</p> <p>To the best of PGE's knowledge, after reasonable inquiry, no waste disposal or spills, leaks, releases, or discharges of waste occurred into the historical drains at the Harborton Substation.</p> <p>Documented leaks, releases, and spills are addressed in the response to Question 62.</p>	
<p>64. Has any contaminated soil ever been excavated or removed from the Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify and provide copies of any documents regarding:</p>		

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a. amount of soil excavated;	<p>Yes, PCB and/or petroleum hydrocarbon-contaminated gravel/soils have been removed from the Harborton Substation in association with spill clean up activities and during the 2000-2001 Pre-RI Investigation. To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the contaminated soil excavations that have occurred at Harborton Substation during spill response actions and the 2001 Pre-RI remedial action:</p> <ul style="list-style-type: none"> • May 20, 1988 — An oil filter truck spilled 20 gallons of PCB-containing (40 ppm) transformer oil onto the soil/gravel inside the Harborton Substation; see the document (Q62_1988-05-20_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil- and PCB-containing soil/gravel and absorbent generated during the cleanup were likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • March 17, 1994 – A breaker spilled 10 to 15 gallons of PCB-containing (51 ppm) oil onto gravel at the Harborton Substation; see the document (Q62_1994-03-17_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21, the PCB- and oil-contaminated soil/gravel generated during the cleanup was likely transported and disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility. • August 25, 1994 — Oil spilled near AST #2 across an area of 38 feet by 26 feet; see the maintenance request form (Q62_1994-08-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel generated during the cleanup was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • February 9, 1995 — A bushing spilled 5 gallons of oil onto the soil at the Harborton Substation; see the document (Q62_1995-02-09_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. The oil was analyzed; however, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer has knowledge of the PCB-content of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) 	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see Question 21 Attachment Q21a_Waste Stream Summary.pdf</p> <p>Also see Question 62 Attachments Q62_1988-05-20_Spill Report.pdf Q62_1994-03-17_Spill Report.pdf Q62_1994-08-25_Spill Report.pdf Q62_1995-02-09_Spill Report.pdf Q62_1997-02-24_Spill Report.pdf Q62_1997-07-25_Spill Report.pdf Q62_1997-12-04_Spill Report.pdf Q62_1997-12-05_Spill Report.pdf Q62_2000-08-07_Spill Report.pdf Q62_2000-11-14_Spill Report.pdf Q62_2001-04-27_Spill Report.pdf Q62_2002-03-19_Spill Report.pdf Q62_2002-04-02_Spill Reports.pdf Q62_2006-09-21_Spill Report.pdf Q62_2007-04-11_Spill Report.pdf Q62_2007-10-29_Spill Report.pdf Q62_2000-02-04 Email about a Dec 1997 spill.pdf</p>

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	<p>attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> February 24, 1997 — A 1500 kVA transformer spilled approximately 20 gallons of PCB-containing (19 ppm) oil onto soil and gravel at the Harborton Substation during an attempted break-in and bushing theft; see the document (Q62_1997-02-24_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. July 25, 1997 — A breaker spilled 3 gallons of PCB-containing (<5 ppm) oil onto the soil/gravel at the Harborton Substation; see the document (Q62_1997-07-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. December 4, 1997 — An above ground oil tank associated with a non-functioning submerged cable was vandalized, resulting in a release of approximately 40 gallons of cable oil (liquid) onto the soil (solid) near the southern boundary of Parcel A; see the document (Q62_1997-12-04_Spill Report.pdf) attached in response to Question 62. The following day, a second spill report was completed suggesting a second spill occurred in the same area; see the document (Q62_1997-12-05_Spill Report.pdf) attached in response to Question 62. However, it was later determined that the oil observed on 5 December 1997 was from the spill that had occurred the previous day; see the document (Q62_2000-02-04 Email about a Dec 1997 spill.pdf) attached in response to Question 62. The spill was located under the BPA transmission tower near the southern boundary of Parcel A, approximately 200 feet from the Willamette River. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). PGE later removed the entire structure including the oil reservoir; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Although the oil was analyzed, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer knows the exact PCB-content, if 	

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	<p>any, of the spilled oil; however, it was classified as non-PCB (< 50 ppm). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, any remaining oil in the reservoir would likely have been drained and either recycled (in house or by Environmental Management) or incinerated (by Transformer Technologies); the equipment would most likely have been scrapped at Coleman Metals; and the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> • August 7, 2000 — A spare breaker bushing spilled approximately 2 gallons of transformer oil onto soil; see the document (Q62_2000-08-07_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic yard of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • November 14, 2000 — A 16.8 mVA transformer spilled approximately 2 gallons of PCB-containing (3 ppm) oil onto soil and concrete; see the document (Q62_2000-11-14_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 2.5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • April 27, 2001 — A transformer spilled approximately 10 gallons of PCB-containing (21 ppm) oil onto a Wilhelm truck and trailer, as well as the surrounding soil/gravel; see the document (Q62_2001-04-27_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including washing of the vehicle and the removal of contaminated wash water and soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. To the best of PGE's knowledge, after reasonable inquiry, the wash water was either solidified and 	

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	<p>disposed of with the contaminated soil/gravel or may have been treated like vault water for disposal purposes.</p> <ul style="list-style-type: none"> 2001 – During the Harborton Substation Pre-RI Investigation, PGE assessed the nature and extent of soil and groundwater contamination associated with site activities/operations and past spills/release at the Harborton Substation. The Pre-RI identified several areas within the Harborton Substation with petroleum hydrocarbon-impacted soil, at which PGE elected to complete limited source removal actions (excavation and off-site disposal). A total of 11.08 tons of soil were excavated from five small areas in August 2001 and disposed of at the Hillsboro Landfill; see Appendix D of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. These areas targeted soils with total petroleum hydrocarbon concentrations greater than 1,000 ppm and were located near the rail car unloading area, in the switchyard, adjacent to the fuel transfer station, next to AST #2, and at the cable crossing location near the southern boundary of Parcel A. March 19, 2002 — A 69 kVA transformer spilled approximately 0.5 gallon of PCB-containing (41 ppm) oil onto soil and gravel within the substation; see the document (Q62_2002-03-19_Spill Report.pdf) attached in response to Question 62. Laboratory analysis indicated that the oil had a PCB concentration of 41 ppm. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. April 2, 2002 — A transformer spilled approximately 0.5 cup of PCB-containing (56 ppm) oil onto the gravel within the Harborton Substation; see the document (Q62_2002-04-02_Spill Reports.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility. April 2, 2002 — A transformer spilled approximately 1 cup of PCB-containing (23 ppm) oil onto the gravel within the Harborton Substation; see the document (Q62_2002-04-02_Spill Reports.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry 	

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	<p>and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> September 21, 2006 — A Wilhelm truck spilled 10 gallons of hydraulic oil onto the gravel in the rear storage area of Harborton Substation; see the document (Q62_2006-09-21_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 0.5 yards of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. April 11, 2007 — A contractor boom truck spilled 22 gallons of hydraulic oil onto soil and gravel within the Harborton Substation pole storage yard; see the document (Q62_2007-04-11_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 10 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. October 29, 2007 — Vandals trying to remove a bushing caused a 750 kVA transformer to spill approximately 10 gallons of PCB-containing (5 ppm) transformer oil onto the soil and gravel within the Harborton Substation outside the fence; see the document (Q62_2007-10-29_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. 	
<p>b. location of excavation presented on a map or aerial photograph;</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, there are no maps, photographs, or figures that depict the locations of soil and gravel removed in association with the spills described in the response to Question 64a.</p> <p>The five small areas where soil was removed in August 2001 during the Pre-RI remediation are depicted in Figure 23 of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf)</p>	<p>See Question15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p>

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	attached in response to Question 15.	
c. manner and place of disposal and/or storage of excavated soil;	See the response to Question 64a.	
d. dates of soil excavation;	See the response to Question 64a	
e. identity of persons who excavated or removed the soil, if other than a contractor for Respondent;	Soil and gravel removed in the course of spill response would have been performed by personnel from PGE's EM&C construction department or Landscape Department. The PGE EM&C construction department foremen include Dan Loftin and Tim Danchok. The PGE Landscape department foremen include Skip Croft and Larry McDowell. Other PGE EM&C and Landscape personnel have changed over time. Soil excavated in August 2001 during the Pre-RI remediation was performed by Bridgewater Group in association with HAI and/or its subcontractors; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15.	See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf
f. reason for soil excavation;	Soil removal at the Harborton Substation has occurred in the course of spill clean up and response, as well as during the Pre-RI remediation activities.	
g. whether the excavation or removed soil contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the soil contained, and why the soil contained such constituents;	See the response to Questions 64a and 64f, which include the available information on the types of constituents contaminating the soil/gravel and why the soil/gravel contained these constituents.	
h. all analyses or tests and results of analyses of the soil that was removed from the Property;	To the best of PGE's knowledge, after reasonable inquiry, the available results for the oil spilled onto the soil/gravel removed from the Harborton Substation are presented in response to Question 64a, as well as the response and documents attached in response to Question 62. Analyses of soils sampled during the Pre-RI are provided in Appendix E of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf); soil was removed from five small areas, targeting areas with TPH greater than 1,000 ppm.	See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Also see all Question 62 Attachments
i. all analyses or tests and results of analyses of the excavated area after the soil was removed from the Property; and	In general, spills are cleaned up to remove all visible contamination plus 1 foot laterally. Soil confirmation sampling occurred in 2001 at the Harborton Substation in association with the soil removal conducted during the Pre-RI Investigation; see pages 19 through 47, Tables 13 through 16, and Appendix E of the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15.	See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf
j. all persons, including contractors, with information about (a) through (i) of this request.	Multiple individuals have had authority within PGE to access and conduct activities on the Harborton Substation. These are listed on documents attached in response to Question 6g. Also see the documents attached in response to Question 38, for PGE personnel responsible for environmental matters from 1980 to the present. Some soil removals were performed by personnel from EM&C construction department or Landscape Department. The PGE Landscape department foremen include Skip Croft and Larry McDowell. Other PGE EM&C and Landscape personnel have changed over time.	See all Question 6g Attachments Also see all Question 38 Attachments

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	The Pre-RI was conducted by Bridgewater Group Inc in association with HAI.	
<p>65. Have you ever tested the groundwater under your Property? If so, please provide copies of all data, analysis, and reports generated from such testing.</p>	<p>Yes. In October 2000, four monitoring wells were installed (MW-1 through MW-4) to depths of 14 to 22 feet bgs. In October 2001, a fifth monitoring well (MW-5) was installed to a depth of 16 ft bgs. These monitoring wells were used in the Preliminary Remedial Investigation (Pre-RI) Assessment. See the documents (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf, Q15_2002-03-28 MW-2 Sampling Results.pdf, and Q15_2002-03-01 GW Data.pdf) attached in response to Question 15.</p> <p>The findings of the Pre-RI concluded that the groundwater below the Harborton Substation is not contaminated above actionable concentrations; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15.</p>	<p>See Question 15 Attachments Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_2002-03-28 MW-2 Sampling Results.pdf Q15_2002-03-01 GW Data.pdf</p>
<p>66. Have you treated, pumped, or taken any kind of response action on groundwater under your Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify:</p> <p>a. reason for groundwater action;</p> <p>b. whether the groundwater contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the groundwater contained, and why the groundwater contained such constituents;</p> <p>c. all analyses or tests and results of analyses of the groundwater;</p> <p>d. if the groundwater action has been completed, describe the basis for ending the groundwater action; and</p> <p>e. all persons, including contractors, with information about (a) through (c) of this request.</p>	<p>No. The findings of the Pre-RI concluded that the groundwater below the Harborton Substation is not contaminated above actionable concentrations; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. To the best of PGE's knowledge, after reasonable inquiry, groundwater has not been treated or pumped at Harborton Substation.</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p>
<p>67. Was there ever a spill, leak, release or discharge of a hazardous substance,</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, there have been no releases from the Harborton Substation to the Willamette River.</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p>

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<p>waste, or material into the Willamette River from any equipment, structure, or activity occurring on, over, or adjacent to the river? If the answer to the preceding question is anything but an unqualified "no", identify:</p> <p>a. the nature of the hazardous substance, waste, or material spilled, leaked, released or discharged;</p> <p>b. the dates of each such occurrence;</p> <p>c. the amount and location of such release;</p> <p>d. were sheens on the river created by the release;</p> <p>e. was there ever a need to remove or dredge any solid waste, bulk product, or other material from the river as a result of the release? If so, please provide information and description of when such removal/dredging occurred, why, and where the removed/dredged materials were disposed.</p>	<p>The Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15 demonstrated/concluded that there is no likely present or past source or pathway for release of hazardous substances to Willamette River surface water or sediments at or from the Harborton Substation and that the Harborton Substation does not present a "high priority threat to present and future public health, safety, welfare, or the environment."</p> <p>The Oregon DEQ and USEPA reviewed the results of the Pre-RI Report and associated documents/information and agreed that the site is not a current source of contamination to the Willamette River; see the documents (Q50_2005-12-06 DEQ to Norton.pdf and Q50_2004-05-18 EPA Agrees to Upland Source Control.pdf) attached in response to Question 50. The DEQ also stating that the Harborton Substation is a low priority for further action.</p>	<p>Also see Question 50 Attachments Q50_2004-05-18 EPA Agrees to Upland Source Control.pdf Q50_2005-12-06 DEQ to Norton.pdf</p>
<p>68. For any releases or threatened releases of PCB(s), identify the date, quantity, location and type of PCB(s) or PCB(s) containing materials or liquids, and the nature of any response to or cleanup of the release.</p>	<p>In general, PGE replaces PCB-containing or potentially PCB-containing substation and switchyard equipment (e.g., transformers, capacitors, lamp ballasts, circuit breakers, bushings, and step regulators) with non-PCB oil containing equipment (< 50 ppm PCBs) as it is removed from service. The primary materials that may have been used for equipment maintenance include dielectric fluids (oil) and transformer oil, which may have historically contained PCBs. To the best of PGE's knowledge, after reasonable inquiry, other than minor repairs, electrical equipment maintenance is/was generally not performed on site. Instead, equipment is/was taken out of service and transported to PGE's waste and material handling facility for repairs and retrofitting.</p> <p>See the documents (Q21a_2009_Oil Filled Equip in Service-Switchyrd.pdf and Q21a_2009_Oil Filled Equip in Service-Substation.pdf) attached in response to Question 21a for the list of oil-filled equipment currently in operation at the Harborton Substation, as well as the document (Q21a_2009_Stored Oil Filled Equipment.pdf) attached in response to Question 21a for the list of oil-filled equipment currently stored at the Harborton Substation (as of May 2009). The documents identify the position of the oil-filled equipment, the serial number of the equipment,</p>	<p>See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf</p> <p>Also see Question 19 Attachments Q19_1985-10-09 SPCC.pdf Q19_1996-03-05 SPCC.pdf Q19_1997-07-28 SPCC.pdf Q19_1999-02-23 SPCC.pdf Q19_2003-02-14 SPCC.pdf Q19_2003-12-15 SPCC.pdf</p> <p>Also see Question 21 Attachments Q21a_Waste Stream Summary.pdf Q21a_2009_Oil Filled Equip in Service-Switchyrd.pdf Q21a_2009_Oil Filled Equip in Service-Substation.pdf Q21a_2009_Stored Oil Filled Equipment.pdf</p>

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	<p>the year manufactured, the detected PCB concentrations, and the date tested for PCBs, and the total volume of oil. Several pieces of the oil-filled equipment listed in the document are assumed to contain less than 1 ppm PCBs because they were manufactured after 1978. Also see the documents (Q21_1985-01-17_Oil Filled Equipment.pdf, Q21a_1985_Inventory Sheet for Harborton.pdf, Q21_1986-11-07_Oil Filled Equipment.pdf, and Q21a_2007-09-00 Substation Equipment List.pdf) attached in response to Question 21a, which describe PGE's operational and stored oil-filled equipment at Harborton Substations in 1985, 1986, and 2007. In addition, oil-filled equipment operated and stored at the Harborton Substation in 1985, 1996, 1997, 1999, and 2003 are listed in the SPCC plans (Q19_1985-10-09 SPCC.pdf, Q19_1996-03-05 SPCC.pdf, Q19_1997-07-28 SPCC.pdf, Q19_1999-02-23 SPCC.pdf, Q19_2003-02-14 PCC.pdf, and Q19_2003-12-15 SPCC.pdf) attached in response to Question 19.</p> <p>From 1995/1996 to 2002, the maintenance building and surrounding area were used for the temporary storage, consolidation, management, and packaging of onsite and off-site PCB-containing electrical equipment, drained electrical equipment oil, and spill response excavated soil and clean up material prior to off-site disposal. Obsolete equipment oil draining activities only occurred within the maintenance building. Adjacent to the maintenance building, water from off-site electrical vaults was filtered using a carbon filtration system prior to off-site disposal/recycling. See the response to Question 16 and 21 for further details. To the best of PGE's knowledge, after reasonable inquiry, there were no spills resulting from these waste and used material handling activities.</p> <p>The following summarizes the known remediation activities conducted at the Harborton Substation associated with the known releases or potential releases of PCB-containing oil:</p> <ul style="list-style-type: none"> • May 20, 1988 — An oil filter truck spilled 20 gallons of PCB-containing (40 ppm) transformer oil onto the soil/gravel inside the Harborton Substation; see the document (Q62_1988-05-20_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil- and PCB-containing soil/gravel and absorbent generated during the cleanup were likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • March 17, 1994 – A breaker spilled 10 to 15 gallons of PCB-containing (51 ppm) oil onto gravel at the Harborton Substation; see the document (Q62_1994-03-17_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21, the PCB- and oil-contaminated soil/gravel generated during the cleanup was likely transported and disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility. 	<p>Q21a_2007-09-00 Substation Equipment List.pdf Q21_1986-11-07_Oil Filled Equipment.pdf Q21a_1985_Inventory Sheet for Harborton.pdf Q21_1985-01-17_Oil Filled Equipment.pdf</p> <p>Also see Question 62 Attachments Q62_1988-05-20_Spill Report.pdf Q62_1994-03-17_Spill Report.pdf Q62_1994-08-25_Spill Report.pdf Q62_1995-02-09_Spill Report.pdf Q62_1997-02-24_Spill Report.pdf Q62_1997-07-25_Spill Report.pdf Q62_1997-12-04_Spill Report.pdf Q62_1997-12-05_Spill Report.pdf Q62_2000-02-04 Email about a Dec 1997 spill.pdf Q62_2000-08-07_Spill Report.pdf Q62_2000-11-14_Spill Report.pdf Q62_2001-04-27_Spill Report.pdf Q62_2002-03-19_Spill Report.pdf Q62_2002-04-02_Spill Reports.pdf Q62_2004-11-01_Spill Report.pdf Q62_2007-10-29_Spill Report.pdf</p>

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	<ul style="list-style-type: none"> • August 25, 1994 — Oil spilled near AST #2 across an area of 38 feet by 26 feet; see the maintenance request form (Q62_1994-08-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel likely generated during the cleanup was disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • February 9, 1995 — A bushing spilled 5 gallons of oil onto the soil at the Harborton Substation; see the document (Q62_1995-02-09_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. The oil was analyzed; however, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer has knowledge of the PCB-content of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content after interim storage at a PGE waste and material handling facility. • February 24, 1997 — A 1500 kVA transformer spilled approximately 20 gallons of PCB-containing (19 ppm) oil onto soil and gravel at the Harborton Substation during an attempted break-in and bushing theft; see the document (Q62_1997-02-24_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • July 25, 1997 — A breaker spilled 3 gallons of PCB-containing (<5 ppm) oil onto the soil/gravel at the Harborton Substation; see the document (Q62_1997-07-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon and PCB-containing soil/gravel generated during the cleanup was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after 	

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	<p>interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> December 4, 1997 — An above ground oil tank associated with a non-functioning submerged cable was vandalized, resulting in a release of approximately 40 gallons of cable oil (liquid) onto the soil (solid) near the southern boundary of Parcel A; see the document (Q62_1997-12-04_Spill Report.pdf) attached in response to Question 62. The following day, a second spill report was completed suggesting a second spill occurred in the same area; see the document (Q62_1997-12-05_Spill Report.pdf) attached in response to Question 62. However, it was later determined that the oil observed on 5 December 1997 was from the spill that had occurred the previous day; see the document (Q62_2000-02-04 Email about a Dec 1997 spill.pdf) attached in response to Question 62. The spill was located under the BPA transmission tower near the southern boundary of Parcel A, approximately 200 feet from the Willamette River. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). PGE later removed the entire structure including the oil reservoir; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. Although the oil was analyzed, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer knows the exact PCB-content, if any, of the spilled oil; however, it was classified as non-PCB (< 50 ppm). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, any remaining oil in the reservoir would likely have been drained and either recycled (in house or by Environmental Management) or incinerated (by Transformer Technologies); the equipment would most likely have been scrapped at Coleman Metals; and the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. August 7, 2000 — A spare breaker bushing spilled approximately 2 gallons of transformer oil onto soil; see the document (Q62_2000-08-07_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic yard of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. November 14, 2000 — A 16.8 mVA transformer spilled approximately 2 gallons of PCB-containing (3 ppm) oil onto soil and concrete; see the document (Q62_2000-11-14_Spill Report.pdf) attached in response to Question 62. The spill did not contact 	

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	<p>water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 2.5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.</p> <ul style="list-style-type: none"> • April 27, 2001 — A transformer spilled approximately 10 gallons of PCB-containing (21 ppm) oil onto a Wilhelm truck and trailer, as well as the surrounding soil/gravel; see the document (Q62_2001-04-27_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including washing of the vehicle and the removal of contaminated wash water and soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. To the best of PGE's knowledge, after reasonable inquiry, the wash water was either solidified and disposed of with the contaminated soil/gravel or may have been treated like vault water for disposal purposes. • March 19, 2002 — A 69 kVA transformer spilled approximately 0.5 gallon of PCB-containing (41 ppm) oil onto soil and gravel within the substation; see the document (Q62_2002-03-19_Spill Report.pdf) attached in response to Question 62. Laboratory analysis indicated that the oil had a PCB concentration of 41 ppm. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 5 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • April 2, 2002 — A transformer spilled approximately 0.5 cup of PCB-containing (56 ppm) oil onto the gravel within the Harborton Substation; see the document (Q62_2002-04-02_Spill Reports.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Arlington Landfill after interim storage at a PGE waste and material handling facility 	

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	<ul style="list-style-type: none"> • April 2, 2002 — A transformer spilled approximately 1 cup of PCB-containing (23 ppm) oil onto the gravel within the Harborton Substation; see the document (Q62_2002-04-02_Spill Reports.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of approximately 1 cubic feet of contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. • November 1, 2004 — A transformer capacitor spilled an unknown quantity of oil onto the asphalt within the Harborton Substation; see the document (Q62_2004-11-01_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil-contaminated soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility. • October 29, 2007 — Vandals trying to remove a bushing caused a 750 kVA transformer to spill approximately 10 gallons of PCB-containing (5 ppm) transformer oil onto the soil and gravel within the Harborton Substation; see the document (Q62_2007-10-29_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the PCB- and oil-contaminated soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility. <p>See the responses to Questions 21, 47, and 62. Also see the annual PCB reports (1978-2008) for PGE (all PGE sites combined), which are provided in a supplemental submittal (Supplemental Submittal S3).</p>	
69. For any releases or threatened releases of PCB(s) and/or PCB(s) containing materials or liquids, identify and provide copies of any documents	See the responses to Questions 62 and 68.	

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regarding the quantity and type of waste generated as a result of the release or threatened release, the disposition of the waste, provide any reports or records relating to the release or threatened release, the response or cleanup and any records relating to any enforcement proceeding relating to the release or threatened release. Provide all documentation regarding, but not limited to, the following releases:		
a. a May 20, 1988 release of 20 gallons of 400 parts per million PCB transformer oil;	On 20 May 1988, an oil filter truck spilled 20 gallons of PCB-containing (40 ppm) transformer oil onto the soil/gravel inside the Harborton Substation; see the document (Q62_1988-05-20_Spill Report.pdf) attached in response to Question 62. Please note: the transformer oil was 40 ppm , not 400 ppm. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil- and PCB-containing soil/gravel and absorbent was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.	See Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 62 Attachment Q62_1988-05-20_Spill Report.pdf
b. a February 9, 1995 release of 5 gallons of oil that spilled from a bushing on the ground;	On 9 February 1995, a bushing spilled 5 gallons of oil onto the soil at the Harborton Substation; see the document (Q62_1995-02-09_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). The oil was analyzed; however, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer has knowledge of the PCB-content of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content after interim storage at a PGE waste and material handling facility.	See Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 62 Attachment Q62_1995-02-09_Spill Report.pdf
c. a February 24, 1997 release of 20 gallons of 19 parts per million PCB transformer oil onto the ground, and;	On 24 February 1997, a 1500 kVA transformer spilled approximately 20 gallons of PCB-containing (19 ppm) oil onto soil and gravel at the Harborton Substation during an attempted break-in and bushing theft; see the document (Q62_1997-02-24_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.	See Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 62 Attachment Q62_1997-02-24_Spill Report.pdf

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d. a July 25, 1997 release of 3 gallons of less than 5 parts per million PCB oil from a break on the ground, and;	On 25 July 1997, a breaker spilled 3 gallons of PCB-containing (<5 ppm) oil onto the soil/gravel at the Harborton Substation; see the document (Q62_1997-07-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon and PCB-containing soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.	See Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 62 Attachment Q62_1997-07-25_Spill Report.pdf
e. a December 4, 1997 release of 40 gallons of cable oil onto the ground following vandalism at the Harborton substation.	On 4 December 1997, an above ground oil tank associated with a non-functioning submerged cable was vandalized, resulting in a release of approximately 40 gallons of cable oil (liquid) onto the soil (solid) near the southern boundary of Parcel A; see the attached document (Q62_1997-12-04_Spill Report.pdf). The following day, a second spill report was completed suggesting a second spill occurred in the same area; see the document (Q62_1997-12-05_Spill Report.pdf) attached in response to Question 62. However, it was later determined that the oil observed on 5 December 1997 was from the spill that had occurred the previous day; see the document (Q62_2000-02-04 Email about a Dec 1997 spill.pdf) attached in response to Question 62. The spill was located under the BPA transmission tower near the southern boundary of Parcel A, approximately 200 feet from the Willamette River. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). PGE later removed the entire structure including the oil reservoir; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. The spilled cable oil was non-PCB (< 50 ppm). Although the oil was analyzed, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer knows the exact PCB-content, if any, of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility.	See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Also see Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 62 Attachment Q62_1997-12-04_Spill Report.pdf
Section 7.0 - Property Investigations		
70. Provide information and documentation concerning all inspections, evaluations, safety audits, correspondence and any other documents associated with the conditions, practices, and/or procedures at the Property concerning insurance issues or insurance coverage matters.	A loss prevention inspection was conducted by Arkwright Mutual Insurance for the Harborton Substation (Parcel A) in 1990; see the attached loss prevention report (Q70_1990 Fire Insurance Report.pdf). In 2004, FM Global inspected the Harborton Substation for fire and natural hazards; see the attached risk report (Q70_2004 Risk Report.pdf). An engineer from PGE's office of Facilities Management (FM) conducts several inspections a year at most of our locations. The engineer will do a complete walk through each facility looking for fire hazards and will issue a recommendation when a problem is found. Along with these inspections, the fire protection systems and equipment are checked and usually functionally tested. There are locations that are inspected by FM which do not require the issuing of an inspection report. These locations are small substations where there are only pressure vessels located on the system circuit breakers. This inspection is required by the State	Question 70 Attachments Q70_1990 Fire Insurance Report.pdf Q70_2004 Risk Report.pdf Q70_Seacor 1994 AST Related Fires.pdf

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	<p>of Oregon. Following the inspection, the inspector will send his report to the State so they can keep up to date on the condition of our pressure vessels.</p> <p>In 1994, Science & Engineering Analysis Corporation (SEACOR) completed a report that reviewed the fire and explosion potential for ASTs, including those at the Harborton Substation, on behalf of GATX. See the attached document (Q70_Seacor 1994 AST Related Fires.pdf).</p> <p>Copies of PGE's relevant general liability insurance policies are provided in a supplemental submittal (Supplemental Submittal S4).</p>	
<p>71. Describe the purpose for, the date of initiation and completion, and the results of any investigations of soil, water (ground or surface), sediment, geology, and hydrology or air quality on or about each Property. Provide copies of all data, reports, and other documents that were generated by you or a consultant, or a federal or state regulatory agency related to the investigations that are described.</p>	<p>To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the reports, information, or data PGE has related to soil, water (ground and surface), or air quality and geology/hydrogeology at the Harborton Substation (Parcel A) and Parcel B:</p> <ul style="list-style-type: none"> Between 1972 and 1979, there were multiple correspondence/reports between PGE and the Oregon DEQ, the USEPA, the CWAPA, and the COP regarding the potential environmental impact and air emissions permit for the Harborton Substation, which included estimated air emissions; see the documents (Q50_1972-1976 Emission Correspondences.pdf, Q50_DEQ Staff Report for 1973 Public Hearing.pdf, Q50_PUC Study 1977.pdf, Q50_Special Report_The Harborton Issue 1977.pdf, and Q50_1979 DEQ on Harborton Turbines.pdf) attached in response to Question 50. Between 1972 and 1976, Dames & Moore completed several soil investigations to determine the appropriate location for structure foundations (e.g. ASTs, turbines, switchyard, etc) in conjunction with the initial development/construction of the Harborton Substation; see the documents (Q15_D&M 1972 Boring Report.pdf, Q15_D&M 1972 Preliminary Foundation Rec.pdf, Q15_D&M 1973 Soil Investigation.pdf, and Q15_D&M 1976 Foundation Investigation.pdf) attached in response to Question 15. The Environmental Report for PGE Harborton Combustion Gas Turbine Generating Plant and Harborton Transmission Substation Facility report (Q15_1973 PGE Environmental Report.pdf) attached in response to Question 15 was submitted to the Portland City Planning Commission by PGE and concluded that there was no feasible alternative location for the generating plant. Also see the attached report (Q15_Addendum to 1973 PGE Environmental Report.pdf). On 3 February 1976, Glen Odell (on behalf of PGE) completed A Critical Review of the Harborton Station Air Quality Impact; see the document (Q15_Odell 1976 Air Quality Report.pdf) attached in response to Question 15. The report reviewed/evaluated the DEQ air quality analysis. In 1986, Geotechnical Resources Inc completed a Phase I Report, Geotechnical 	<p>See Question 15 Attachments <u>Reports</u></p> <p>Q15_D&M 1972 Boring Report.pdf Q15_D&M 1972 Preliminary Foundation Rec.pdf Q15_D&M 1973 Soil Investigation.pdf Q15_1973 PGE Environmental Report.pdf Q15_Addendum to 1973 PGE Environmental Report.pdf Q15_D&M 1976 Foundation Investigation.pdf Q15_Odell 1976 Air Quality Report.pdf Q15_1986-04-08 GRI Phase I Report.pdf Q15_1998-07-06 Phase I Env Site Assessment.pdf Q15_1999-07-26 DEQ Site Assess Recomm.pdf Q15_1999 Response to DEQ Strat.pdf Q15_Addendum to 1999 Response to DEQ Strat.pdf Q15_1999-05-12 PGE and Metro Memo.pdf Q15_2001-02-21 Draft Work Plan Addendum.pdf Q15_2001-08-22 Proposed Soil Excavation.pdf Q15_2001-09-05 Data Package No 2.pdf Q15_2001-09-27 Silt Contour Map.pdf Q15_2002-03-28 MW-2 Sampling Results.pdf Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Q15_Bridgewater-HAI 2000 Pre-RI SAP.pdf Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf Q15_Bridgewater-HAI 2001 Phase I and II.pdf Q15_Bridgewater-HAI 2001 Pre-RI WP Ad1.pdf</p> <p><u>Analytical Data</u></p> <p>Q15_1994-03-23 Soil Data.pdf Q15_1995-10-06 Soil Data.pdf Q15_1995-12-05 Soil Data.pdf Q15_1996-01-23 Soil Data.pdf Q15_1997-02-27 Soil Data.pdf Q15_1997-03-24 Water Data.pdf</p>

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	<p>Consultation regarding potential filling of the 19-acre western Harborton Substation area; see the report (Q15_1986-04-08 GRI Phase I Report.pdf) attached in response to Question 15.</p> <ul style="list-style-type: none"> In 1998, EMCON completed a Phase I ESA of the Harborton Substation on behalf of Metro (a potential buyer); see the document (Q15_1998-07-06 Phase I Env Site Assessment.pdf) attached in response to Question 15. The Phase I ESA concluded that there did not appear to have been any significant spills or releases at the Harborton Substation; however, further sampling was recommended. See the PGE internal 1999 memorandum (Q15_1999-05-12 PGE and Metro Memo.pdf) attached in response to Question 15, which discusses the potential sale of the property to Metro and the proposed/recommended additional sampling by a (former) PGE employee. In July/August 1999 DEQ completed a Site Assessment – Strategy Recommendation report of the Harborton Substation, specifically to evaluate site activities potentially associated with the contamination in the adjacent Portland Harbor sediment; see the document (Q15_1999-07-26 DEQ Site Assess Recomm.pdf) attached in response to Question 15. The report concluded that although the site did not warrant adding to the DEQ's CRL at that time, a remedial investigation was needed. In November 1999, Bridgewater Group, on behalf of PGE, completed a Response to DEQ's Strategy Recommendation for PGE's Harborton Substation Facility; see the documents (Q15_1999 Response to DEQ Strat.pdf and Q15_Addendum to 1999 Response to DEQ Strat.pdf) attached in response to Question 15. The document clarified PGE site operations/activities and refuted some of the DEQ's suspected links of Harborton Substation activities and sediment contamination in the adjacent portion of the Portland Harbor. On 30 November 1999, PGE entered into the DEQ's Voluntary Cleanup Program for the Harborton Substation (Parcel A) and Parcel B. In June 2000, PGE entered into a Voluntary Agreement for Remedial Investigation and Source control Measures with DEQ, which included the option for PGE to perform a Pre-RI assessment, or focused investigation of Site uplands. On behalf of PGE, Bridgewater Group in association with HAI conducted a Pre-RI of the Harborton Substation between 2000 and 2002. This assessment generated the following reports: <ul style="list-style-type: none"> "Pre-RI Sampling and Analysis Plan" on 29 September 2000; see the document (Q15_Bridgewater-HAI 2000 Pre-RI SAP.pdf) attached in response to Question 15, "Pre-RI Work Plan" on 5 October 2000; see the document (Q15_Bridgewater-HAI 2000 Pre-RI Work Plan.pdf) attached in response to Question 15. "Phase I and II Pre-RI Results" on 29 January 2001; see the document (Q15_Bridgewater-HAI 2001 Phase I and II.pdf) attached in response to 	<p>Q15_1998-08-26 Water Data.pdf Q15_1998-08-27 Water Data.pdf Q15_2000-10-11_DEQ Split Sample.pdf Q15_2002-03-01 Data.pdf Q15_2002-03-01 GW Data.pdf Q15_2002-04-11 Soil Data.pdf Q15_2006-09-12 Soil Data.pdf Q15_2007-08-24 Soil Data.pdf</p> <p><u>Other Document</u> Q15_Harborton Sediment Chemicals.pdf</p> <p>Also see Question 19 Attachments Q19_1985-10-09 SPCC.pdf Q19_1986-10-17 SPCC.pdf Q19_1996-03-05 SPCC.pdf Q19_2003-02-14 SPCC.pdf Q19_2003-12-15 SPCC.pdf Q19_1997-07-28 SPCC.pdf Q19_1999-02-23 SPCC.pdf</p> <p>Also see Question 50 Attachments Q50_1972-1976 Emission Correspondences.pdf Q50_DEQ Staff Report for 1973 Public Hearing.pdf Q50_PUC Study 1977.pdf Q50_Special Report_The Harborton Issue 1977.pdf Q50_1979 DEQ on Harborton Turbines.pdf Q50_2005-12-06 DEQ to Norton.pdf Q50_2004-05-18 EPA Agrees to Upland Source Control.pdf</p> <p>Also see all Question 62 Attachments</p>

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	<p>Question 15.</p> <ul style="list-style-type: none"> ○ "Pre-RI Work Plan Addendum No. 1" on 30 March 2001; see the document (Q15_Bridgewater-HAI 2001 Pre-RI WP Ad1.pdf) attached in response to Question 15. ○ "Data Package (No. 2), PGE Harborton Substation Facility" on 5 September 2001; see the document (Q15_2001-09-05 Data Package No 2.pdf) attached in response to Question 15. ○ "Pre-RI Report" on 11 February 2002; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. <p>The Pre-RI evaluated the nature and extent of soil and groundwater contamination associated with site activities/operations and past spills/release at the Harborton Substation. The Pre-RI identified several areas within the Harborton Substation with petroleum hydrocarbon-impacted soil, at which PGE elected to complete limited source removal actions (excavation and off-site disposal). A total of 11.08 tons of soil were excavated from five small areas in 2001. These areas targeted soils with total petroleum hydrocarbon concentrations greater than 1,000 ppm and were located near the rail car unloading area, in the switchyard, adjacent to the fuel transfer station, next to AST #2, and at the cable crossing location near the southern boundary of Parcel A. These areas are depicted in Figure 23 within the Pre-RI Report (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15.</p> <p>The Pre-RI Report demonstrated/concluded that there is no likely present or past source or pathway for the release of hazardous substances to Willamette River surface water or sediments at or from the Harborton Substation and that the Harborton Substation does not present a "high priority threat to present and future public health, safety, welfare, or the environment."</p> <p>The Oregon DEQ and USEPA reviewed the results of the Pre-RI Report and associated documents/information and agreed that the site is not a current source of contamination to the Willamette River; see the documents (Q50_2005-12-06 DEQ to Norton.pdf and Q50_2004-05-18 EPA Agrees to Upland Source Control.pdf) attached in response to Question 50.</p> <p>Also see the associated documents (Q15_2001-02-21 Draft Work Plan Addendum.pdf, Q15_2001-08-22 Proposed Soil Excavation.pdf, Q15_2001-09-27 Silt Contour Map.pdf, and Q15_2002-03-28 MW-2 Sampling Results.pdf) attached in response to Question 15. For information regarding the disposal of wastes and materials, see the response to Question 21.</p> <p>In addition, soil and water analytical data not already included in the reports are also attached in response to Question 15. Also attached in response to Question 15 is a table comparing the Portland Harbor sediment concentrations (unknown date) adjacent to Harborton Substation to a</p>	

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	<p>1973 USGS study; see the attached document (Q15_Harborton Sediment Chemicals.pdf).</p> <p>The SPCC Plans (Q19_1985-10-09 SPCC.pdf, Q19_1986-10-17 SPCC.pdf, Q19_1996-03-05 SPCC.pdf, Q19_1997-07-28 SPCC.pdf, Q19_1999-02-23 SPCC.pdf, Q19_2003-02-14 SPCC.pdf, and Q19_2003-12-15 SPCC.pdf), attached in response to Question 19, briefly discuss topography and soil condition at the Harborton Substation (Parcel A).</p> <p>To the best of PGE's knowledge, after reasonable inquiry, PGE does not have any reports, information, or data for Parcels C through H related to soil, water (ground and surface), or air quality and geology/hydrogeology.</p> <p>For further details on all known spills/releases at the Harborton Substation, see the response and documents attached for Question 62.</p>	
a. a May 20, 1988 release of 20 gallons of 400 parts per million PCB transformer oil;	<p>On 20 May 1988, an oil filter truck spilled 20 gallons of PCB-containing (40 ppm) transformer oil onto the soil/gravel inside the Harborton Substation; see the document (Q62_1988-05-20_Spill Report.pdf) attached in response to Question 62. Please note: the transformer oil was 40 ppm, not 400 ppm. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the oil- and PCB-containing soil/gravel and absorbent was likely disposed of at the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.</p>	<p>See Question 21 Attachment Q21a_Waste Stream Summary.pdf</p> <p>Also see Question 62 Attachment Q62_1988-05-20_Spill Report.pdf</p>
b. a February 9, 1995 release of 5 gallons of oil that spilled from a bushing on the ground;	<p>On 9 February 1995, a bushing spilled 5 gallons of oil onto the soil at the Harborton Substation; see the document (Q62_1995-02-09_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). The oil was analyzed; however, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer has knowledge of the PCB-content of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content after interim storage at a PGE waste and material handling facility.</p>	<p>See Question 21 Attachment Q21a_Waste Stream Summary.pdf</p> <p>Also see Question 62 Attachment Q62_1995-02-09_Spill Report.pdf</p>
c. a February 24, 1997 release of 20 gallons of 19 parts per million PCB transformer oil onto the ground, and;	<p>On 24 February 1997, a 1500 kVA transformer spilled approximately 20 gallons of PCB-containing (19 ppm) oil onto soil and gravel at the Harborton Substation during an attempted break-in and bushing theft; see the document (Q62_1997-02-24_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.</p>	<p>See Question 21 Attachment Q21a_Waste Stream Summary.pdf</p> <p>Also see Question 62 Attachment Q62_1997-02-24_Spill Report.pdf</p>

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d. a July 25, 1997 release of 3 gallons of less than 5 parts per million PCB oil from a break on the ground, and;	On 25 July 1997, a breaker spilled 3 gallons of PCB-containing (<5 ppm) oil onto the soil/gravel at the Harborton Substation; see the document (Q62_1997-07-25_Spill Report.pdf) attached in response to Question 62. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon and PCB-containing soil/gravel was likely disposed of at the Hillsboro Landfill or the Columbia Ridge Landfill after interim storage at a PGE waste and material handling facility.	See Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 62 Attachment Q62_1997-07-25_Spill Report.pdf
e. a December 4, 1997 release of 40 gallons of cable oil onto the ground following vandalism at the Harborton substation.	On 4 December 1997, an above ground oil tank associated with a non-functioning submerged cable was vandalized, resulting in a release of approximately 40 gallons of cable oil (liquid) onto the soil (solid) near the southern boundary of Parcel A; see the attached document (Q62_1997-12-04_Spill Report.pdf). The following day, a second spill report was completed suggesting a second spill occurred in the same area; see the document (Q62_1997-12-05_Spill Report.pdf) attached in response to Question 62. However, it was later determined that the oil observed on 5 December 1997 was from the spill that had occurred the previous day; see the document (Q62_2000-02-04 Email about a Dec 1997 spill.pdf) attached in response to Question 62. The spill was located under the BPA transmission tower near the southern boundary of Parcel A, approximately 200 feet from the Willamette River. The spill did not contact water. The spill was reported to the PGE System Control Center, contained, and cleaned up (including the removal of the contaminated soil/gravel). PGE later removed the entire structure including the oil reservoir; see the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15. The spilled cable oil was non-PCB (< 50 ppm). Although the oil was analyzed, to the best of PGE's knowledge, after reasonable inquiry, PGE no longer knows the exact PCB-content, if any, of the spilled oil. To the best of PGE's knowledge, after reasonable inquiry and based on the document (Q21a_Waste Stream Summary.pdf) attached in response to Question 21a, the petroleum hydrocarbon- and PCB-containing soil/gravel was likely disposed of at the appropriate landfill (Hillsboro Landfill, Columbia Ridge Landfill, or Arlington Landfill) depending on PCB content, if any, after interim storage at a PGE waste and material handling facility.	See Question 15 Attachment Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf Also see Question 21 Attachment Q21a_Waste Stream Summary.pdf Also see Question 62 Attachment Q62_1997-12-04_Spill Report.pdf
72. Describe any remediation or response actions you or your agents or consultants have ever taken on each Property either voluntarily or as required by any state or federal agency. If not otherwise already provided under this Information Request, provide copies of all investigations, risk assessments or risk evaluations, feasibility studies, alternatives analysis, implementation	To the best of PGE's knowledge, after reasonable inquiry, the following summarizes the known remedial activities at the site: <ul style="list-style-type: none">Spill/release response and clean up activities, including the excavation of contaminated soil during the Pre-RI Investigation. These are described in the responses to Questions 15, 21, and 62. See the document (Q15_Bridgewater-HAI 2002 Pre-RI Report.pdf) attached in response to Question 15 and the documents attached in response to Question 62.Asbestos abatement was conducted in 1987; see the attached document (Q72_1987 Asb Abatement.pdf). This document describes the results of the asbestos abatement effort, removing asbestos attached to rubber gaskets on the noise reduction baffles of a	Question 72 Attachments Q72_1987 Asb Abatement.pdf Q72_2006 Asb Survey.pdf See all Question 62 Attachments

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plans, decision documents, monitoring plans, maintenance plans, completion reports, or other document concerning remediation or response actions taken on each Property.	<p>building that burned during metal scrapping by Cliff Koppe Metals Inc. Also see the document (Q21a_1987-2002 Bills of Lading.pdf) attached in response to Question 21a, which includes the asbestos disposal documentation.</p> <ul style="list-style-type: none"> An asbestos survey was conducted in 2006; see the attached document (Q72_2006 Asb Survey.pdf), which identified suspected asbestos-containing materials. To the best of PGE's knowledge, after reasonable inquiry, no remedial action has been taken based on the findings of this investigation. <p>To the best of PGE's knowledge after reasonable inquiry, no other remedial activities have occurred on the Harborton site.</p>	
<p>73. Are you or your consultants planning to perform any investigations of the soil, water (ground or surface), geology, and hydrology or air quality on or about the Property? If so, identify:</p> <p>a. what the nature and scope of these investigations will be;</p> <p>b. the contractors or other persons that will undertake these investigations;</p> <p>c. the purpose of the investigations;</p> <p>d. the dates when such investigations will take place and be completed; and</p> <p>e. where on the Property such investigations will take place.</p>	<p>No future investigations for the Harborton Substation (Parcel A) are planned. Soil confirmation sampling may be conducted in the future, after cleanup of small spill events and general operational activities (e.g., removal, updates, maintenance) on an as needed basis.</p> <p>No investigations of Parcels B through G are planned.</p>	
Section 8.0 - Corporate Information		
<p>74. Provide the following information, when applicable, about you and/or your business(es) that are associated with each Property identified in response to Question 4:</p> <p>a. state the current legal ownership structure (e.g., corporation, sole proprietorship);</p>	<p>Responses and documents for Section 8.0 – Corporate Information for all PGE sites are provided in a supplemental submittal (Supplemental Submittal S1).</p>	

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<p>b. state the names and current addresses of all current and past owners of the business entity or, if a corporation, current and past officers and directors;</p> <p>c. discuss all changes in the business' legal ownership structure, including any corporate successorship, since the inception of the business entity. For example, a business that starts as a sole proprietorship, but then incorporates after a few years, or a business that is subsequently acquired by and merged into a successor. Please include the dates and the names of all parties involved;</p> <p>d. the names and addresses of all current or past business entities or subsidiaries in which you or your business has or had an interest that have had any operational or ownership connection with the Properties identified in response to Question 4. Briefly describe the business activities of each such identified business entities or subsidiaries; and</p> <p>e. if your- business formerly owned or operated a Property identified in response to Question 4, describe any arrangements made with successor owners or operators regarding liability for environmental contamination or property damage.</p>		
<p>75. List all names under which your company or business has ever operated and has ever been incorporated. For</p>		

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<p>each name, provide the following information:</p> <p>a. whether the company or business continues to exist, indicating the date and means by which it ceased operations (e.g., dissolution, bankruptcy, sale) if it is no longer in business;</p> <p>b. names, addresses, and telephone numbers of all registered agents, officers and operations management personnel; and</p> <p>c. names, addresses, and telephone numbers of all subsidiaries, unincorporated divisions or operating units, affiliates, and parent corporations if any, of the Respondent.</p> <p>d. all information requested in (a) through (c) above regarding, but not limited to, the following entities and including their relationship to Respondent (e.g. whether these entities are business partners, separate entities, subsidiaries, and/or aliases etc. of Respondent):</p> <p>i. V & K Service, Inc.; and</p> <p>ii. Jinkz Corp.</p>		
<p>76. Provide all copies of the Respondent's authority to do business in Oregon. Include all authorizations, withdrawals, suspensions and reinstatements.</p>		

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<p>77. If Respondent is, or was at any time, a subsidiary of, otherwise owned or controlled by, or otherwise affiliated with another corporation or entity, then describe the full nature of each such corporate relationship, including but not limited to:</p> <p>a. a general statement of the nature of relationship, indicating whether or not the affiliated entity had, or exercised, any degree of control over the daily operations or decision-making of the Respondent's business operations at the Site;</p> <p>b. the dates such relationship existed;</p> <p>c. the percentage of ownership of Respondent that is held by such other entity(ies);</p> <p>d. for each such affiliated entity provide the names and complete addresses of its parent, subsidiary, and otherwise affiliated entities, as well as the names and addresses of each such affiliated entity's officers, directors, partners, trustees, beneficiaries, and/or shareholders owning more than five percent of that affiliated entity's stock;</p> <p>e. provide any and all insurance policies for such affiliated entity(ies) which may possibly cover the liabilities of the Respondent at each Property; and</p>		
<p>f. provide any and all corporate financial information of such affiliated entities, including but not limited to total revenue or total sales, net income, depreciation, total assets and total</p>		

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<p>current assets, total liabilities and total current liabilities, net working capital (or net current assets), and net worth.</p> <p>g. all information requested in (a) through (f) above regarding, if applicable, but also explain any corporate or financial relationship Respondent may have had or has with the Enron Corporation.</p>		
<p>78. If Respondent is a partnership, please describe the partnership and provide a history of the partnership's existence. Provide a list of all current and past partners of any status (e.g., general, limited, etc.) and provide copies of all documents that created, govern, and otherwise rules the partnership, including any amendments or modifications to any of the originals of such documents, and at least five years of partnership meeting minutes.</p>		
<p>Section 9.0 - Compliance With This Request</p>		
<p>79. Describe all sources reviewed or consulted in responding to this request, including, but not limited to:</p>		
<p>a. the name and current job title of all individuals consulted;</p>	<p>Ron Parr, Facility Management Supervisor Bob Millican, Facility Management Specialist Randy Nicolay, Facility Management Specialist Dave VanBossuyt, Distribution Administration Manager Mark Cooksey, IT Client Services Manager Laura Holgate, Power Supply Eng Services Supervisor Jeddy Beasley, Transportation Services Manager Jayne Allen, Environmental Services Specialist Arya Behbehani-Divers, Environmental Services Manager Brandy Horn, Environmental Services Specialist Mike Livingston, Property Services Manager Tim Calhoun, Network Communications Supervisor – retired Mike Schwartz, Power Supply Eng Services General Manager</p>	<p>Question 79 Attachment Q79_PdxHarbor Contact Information Rev.pdf</p>

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	<p>Rand Sherwood, Utility Services Manager Tom Stodd, Environmental Services Specialist Bob Lazrine, Special Tester Forman Mark Sloan, Wireman Sid Hiller – Manager Kristina Rodgers – Assistant Debby Klinger – Specialist Chuck McCartney – Specialist Alma McGloghlon – Analyst Larry Morgan – Supervisor Gwen Williams - Manager</p> <p>In addition, the attached document (Q79_PdxHarbor Contact Information Rev.pdf) contains additional sources consulted for responses to selected questions.</p>	
b. the location where all sources reviewed are currently reside; and	<p>PGE's Office at: 121 SW Salmon, 1WTC1302, Portland, Oregon 97204. Records are contained in the Facilities Management Departments, the Human Resources Department, and in the Corporate Records Information System (CRIS) database.</p> <p>In addition, the Hawthorne Retiree Museum contains the following:</p> <ul style="list-style-type: none"> • The History of Portland General Electric Company, 1889 - 1981 • <u>Electrifying Eden</u> by Craig Wollner <p>The History of Portland General Electric Company, 1989 - 1981 is attached in response to Question 77, which is part of the Supplemental Submittal S1. A hardcopy of <u>Electrifying Eden</u> was provided in a separate submittal.</p>	
c. the date consulted.	Work on this information request was performed from February 2008 through August 2009.	
80. If not already provided, identify and provide a last known address or phone number for all persons, including Respondent's current and former employees or agents, other than attorneys, who have knowledge or information about the generation, use, purchase, storage, disposal, placement, or other handling of hazardous materials at, or transportation of hazardous substances, waste, or materials to or from each Property identified in response to Question 4.	Harborton Substation is currently an unmanned substation, requiring only periodic maintenance and monthly inspections. See the responses and documents for Questions 2, 4, 6, 15, 21, 38, 40, and 79.	<p>See all Question 6 Attachments</p> <p>Also see all Question 4 Attachments</p> <p>Also see all Question 15 Attachments</p> <p>Also see all Question 21 Attachments</p> <p>Also see all Question 38 Attachments</p> <p>Also see Question 40 Attachment Q40_Waste-Materials Receivers and Carriers.pdf</p> <p>Also see Question 79 Attachment Q79_PdxHarbor Contact Information Rev.pdf</p>

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<p>81. If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available. If the records were destroyed, provide us with the following;</p>	<p>PGE Records Management Services (RMS) provides a uniform records management program for the company. The program includes the Corporate Records Information System (CRIS) an online application used by departments to identify, index and manage their records. RMS also provides records storage and retrieval and document imaging services.</p> <p>RMS can investigate why records are no longer available if we know which records are being sought. Knowing the date, originator and subject of the records in question are essential to determine their availability or their ultimate disposition.</p> <p>Each unique record category is identified in CRIS and assigned a file pattern code (file category). Information about each file category includes the office of record (originator), and retention requirements and regulatory citations – who requires the record to be kept and for how long. The PGE records program and records retention schedule comply with the recordkeeping requirements of the Oregon Public Utility Commission (PUC) and Federal Energy Regulatory Commission (FERC).</p> <p>State and federal guidelines require us to identify which records PGE produces and how and for how long those records will be retained. PGE Policy requires that records should not be destroyed before, or kept after, meeting retention requirements. Consequently, PGE regularly destroys records in the normal course of business, and when legally required to do so. Such destructions are approved by the PGE Records Retention Committee and authenticated and recorded by RMS.</p> <p>How long a particular type of record is retained is based on operating needs, legal and regulatory requirements and, in a few cases, historical or archival value.</p>	
<p>a. the document retention policy between 1937 and the present;</p>	<p>RMS was created in 1977 and we can provide PGE's records management guidelines from 1977 to the present. Prior to that time records management was the responsibility of each functional area, plant or division office. Accounting records were kept in compliance with 18 CFR Part 125, Regulations to Govern the Preservation of Records of Public Utilities and Licensees (1972), issued by the Federal Power Commission (now FERC) and NARUC, the Nat'l Assoc. of Regulatory Utility Commissioners.</p>	
<p>b. the approximate date of destruction;</p>	<p>See the response to Question 81a, above. Since it was established (c. 1977) RMS has maintained a hardcopy or microfilm record of boxes of records destroyed in the normal course of business, if those records were turned over to RMS custodianship. To know <i>when</i> a record was destroyed, it is necessary to know the record category, the approximate date of creation, and which department created it. It should be noted that the level of detail of information about the records destroyed is the same as that used to identify the records when they were sent to storage.</p>	
<p>c. a description of the type of information that would have been contained in the documents;</p>	<p>See the response to Question 81b, above. RMS can help discern what records were typically filed in a particular file category. If similar records from that era exist they may show what information was captured by the documents. For example, a typical "job" form from 1980 would include much the same information listed on a similar job form from 1940, i.e., the work</p>	

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<p>d. the name, job title and most current address known by you of the person(s) who would have produced these documents; the person(s) who would have been responsible for the retention of these documents; the person(s) who would have been responsible for destroying the documents; and the person(s) who had and/or still have the originals or copies of these documents; and</p>	<p>location, equipment used, labor hours, parts, drawings, etc.</p> <p>RMS is responsible for all records sent to the records center from 1977 to present, including ultimate disposition of those records. Records of documents destroyed include the names of the originator, authorizations for destruction (signatures) and the name of the person who physically destroyed or recycled the documents. Individual Responsibility Center (RC) managers are and would have been responsible for maintaining and disposing all other records, i.e., those that were not sent to the archives.</p>	
<p>e. the names and most current addresses of any person(s) who may possess documents relevant to this inquiry.</p>	<p>RMS can provide printed reports from the CRIS of existing records related to the request (that have been entered into CRIS by the originating RC). CRIS shows the names of all departments using the system for managing their records, what categories of records are maintained and where the records are filed (in the department or the records storage center).</p> <p>On request, RMS can provide a list of all RCs that use the CRIS system. This report would show each RC's file plan by document type (or subject) and the types of documents that should be filed under those headings.</p>	
<p>82. Provide a description of all records available to you that relate to all of the questions in this request, but which have not been included in your responses.</p>	<p>Multiple key word searches were performed in PGE's CRIS system. No date restrictions were placed on the searches. The results from each key word search were printed from the CRIS system with either a list of record titles or a "There are no entities to display" message. The "There are no entities to display" message means that based on the search query no records were found. Individual CRIS printouts are available upon request but provide no additional information.</p> <p>Documents not included in this request include:</p> <ul style="list-style-type: none"> • Documents describing other PGE sites • PGE internal emails, correspondences, documents, including handwritten meeting minutes, not specifically relevant to these questions • Documents determined to be Attorney-Client privileged, which are identified on the comprehensive privilege log that will be submitted with the final set of responses. • Duplicate documents/figures • Consultant and subcontractor invoices, work orders, and service contracts • Field notes and draft boring logs • Transcripts of public meetings • Email Correspondence between PGE and its subcontractors • Database of OSHA reportable accidents/injuries for PGE properties in Oregon 	

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	<p>PGE had possession of the following (partial) documents, which are potentially relevant; however, they were not included because they were incomplete public documents:</p> <ul style="list-style-type: none">• The Portland Harbor Sediment Investigation - Full Data Listing of Surface Sediment Results for TOC and Grain Size• The Portland Harbor Sediment Investigation - Statistics for Surface Sediment Results for Total Inorganics.• Weston Coring Field Record and Geologic Log of Sediment Core.• United States Department of the Interior sampling from 1983 from Willamette Harbors• Tables with location of sampling sites in the Willamette River from 1983• Willamette Harbor River Mile - tables of chemical concentrations• Quality of Bottom Material and Elutriates in the Lower Willamette River, Portland Harbor, OR with sediment samples from 1983.• Portland Harbor Sediment Investigation Figures from 1987	